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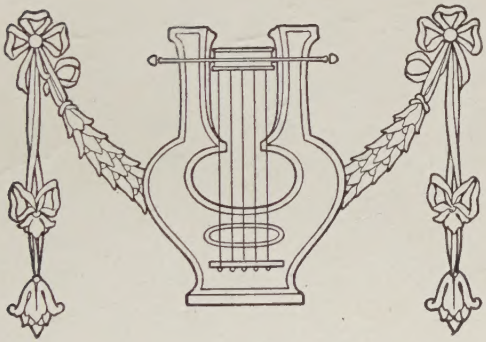
KING RENÉ OF ANJOU WITH HIS COURT MUSICIANS

# THE ORCHESTRA
AND
# ITS INSTRUMENTS

BY

ESTHER SINGLETON



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*To* F. W. C.

*Friend of many years*
*Whose sympathy*
*Crowns all my efforts*

# PREFACE

THE purpose of this book is to give music-lovers and young musical students a more intimate acquaintance with the Symphony Orchestra and its instruments than they, perhaps, possess.

The instruments are described one by one; and, finally, the Orchestra, which is, itself, treated as an instrument on which the Conductor may be said to play.

Attention should be called to the description of Lully's famous Orchestra and to the interesting group of artists who played in it, such as Descoteaux, the tulip-fancier, described by La Bruyère in his *Caractères*, and Marin Marais, one of the greatest *virtuosi* of the Seventeenth Century.

It is often said that the virtuoso-conductor did not appear until the Nineteenth Century. I think the facts given here will prove that Lully was the first of the "star-conductors"; and that our Symphony Orchestras may be said to have their origin in the "Twenty-Four Violins of the King," one of whom is represented in the illustration facing page 160.

It should also be noted that the illustrations have all been photographed especially for this work, — many of them from rare volumes and old prints.

I wish to offer my grateful thanks to Mr. Walter Damrosch for having so kindly read the page-proofs and to Mr. Harry Harkness Flagler for the interest he has taken in the preparation of this book.

E. S.

New York,
*October 4, 1917*

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# THE ORCHESTRA
## AND
# ITS INSTRUMENTS

# THE ORCHESTRA AND ITS INSTRUMENTS

## PRELUDE

WE have just arrived in the Concert Hall, have taken off our wraps and are comfortably seated in our chairs waiting eagerly for the concert to begin.

The Orchestra is entering from the doors at the sides of the stage.

Here come the Violins. They all sit in a group together. These in front of us and on the left of the Conductor's stand are the First Violins; these on the right of the Conductor's stand are the Second Violins. These ten men who seem to carry very large violins are the Violas and they are taking their seats by the side of the Second Violins. Opposite them ten Violoncellos are taking their seats by the side of the First Violins. Behind the Violoncellos stand the Double-Basses.

In the meanwhile, the players of the Woodwind have entered and have seated themselves in a row facing the Conductor, — the Clarinets by the Violas; then the Oboe and Cor Anglais (English Horn); and then the Flutes. Behind the Flutes are the Bassoons; and behind the Oboes and Clarinets are the French Horns. In the back row are Trombones, Trumpets, Drums, Triangle, Cymbals and other Percussion

instruments. On the right, behind the First Violins, is the Harp.

They are all here now, each instrument in its own group, or family.

We cannot understand what any great city is like if we do not know something about the people who compose that city. Take New York, for instance; or London, or Paris, or Boston, or Washington, or Chicago, or San Francisco. Each city has a personality of its own; and so we speak of New York, or London, or Paris, or Boston, or Washington, just as if we were talking of an individual.

It is exactly the same with an Orchestra. Though composed of a collection of individual instruments, the Orchestra has an individual character of its own. It is a *personality* that speaks to us in the beautiful and inspiring language of music; and, therefore, after we learn about the instruments and what part each instrument has to play in forming this little orchestral city, as it were, we shall then turn our thoughts to the Orchestra itself.

The Orchestra is composed of three groups, or families, and one accessory group. Each of these three groups forms a choir of its own, of four parts, — soprano, alto, tenor and bass.

The most important group is that of the stringed instruments, or "Strings," as this family is called. The Violins sing the soprano; the Violas, the alto, or tenor; the Violoncellos, the bass; and the Double-Basses, the deeper bass. All of the "Strings" are played with the bow.

The family next in importance is the "Woodwind,"

— instruments consisting of a long tube made of wood through which the performer blows. Some of these are held horizontally, others longitudinally. These also play in four-part harmony, as it is called, — soprano, alto, tenor and bass.

The Brasswind family comprises the Horns, the Trumpets and Trombones. It forms another set of four voices — soprano, alto, tenor and bass. The performers blow through the tubes of these instruments. These instruments are usually spoken of as the "Brass."

Last of all come the instruments of Percussion, — that is to say instruments that are beaten, or knocked, or struck, or thumped, or shaken, such as the Drums, Triangle, Cymbals and Tambourine. This group is also called the "Battery."

With these three separate choirs grouped into three separate families, each with its special characteristics and accomplishments, the composer is able to do many wonderful things. For example, he can let any choir, or any instrument in that choir, sing a melody while the other choirs accompany it with lovely harmonies, or dispute with it, or start up another melody in opposition to it, or even make comments, pleasant or ill-natured, on it, as it were. Then, in addition, the composer has the "Battery" of beaten instruments to accent the rhythms, or to add sharp, bright, penetrating notes; dull, soft, deep thuds; mutterings and crashes.

The Harp does not belong to any family, or group.

The other instruments are very indifferent about him. Perhaps they regard him as an interloper.

The Harp is not a regular member of the Orchestra: he is only an occasional guest. Although a stringed instrument, the Harp does not belong to the "Strings." He comes from another line, another race, — from the minstrels and bards. The Harp has a poetic and a passionate utterance all his own, which is of an entirely different kind of poetry and passion from that of the Violin tribe.

Applause! Here comes the Conductor! He bows, walks to the stand, bows again and steps upon the platform. Now he turns and looks at the audience. His quick glance sweeps the whole house — from top gallery to parquet — and takes in everything, everywhere. He has now commanded the attention he desires. Everybody is getting quiet. We did not notice — perhaps because we were contributing to it ourselves — that there was a general rustle and chatter and movement. Now that there is a hush over everything we notice the contrast. But the Conductor is not quite satisfied. Some persons are still talking in the box above us. He looks at them and waits for them to finish. He does not have to wait long. They notice the reproof and their chatter ceases suddenly. Now all is quiet.

The Conductor turns and faces his men. He lifts the little, white stick that was lying beside the score on his desk, raps on the desk to command attention from his men and raises his right hand.

What is the first number? Let me see the programme. Thank you. Mendelssohn's *Overture to Midsummer Night's Dream.* Such lovely opening chords! How silvery, delicate, faint and far-away are

those soft, gentle harmonies that melt into one another like the tender hues of sunset clouds! They are, indeed, "the horns of Elfland faintly blowing."

As we hear them we are transported into another world, — a world of fancy and delight. We enter Fairyland ourselves!

Listen to the Violins! Can we not see the tiny flower-fairies, myriads and myriads of them? Here they come, — tripping, dancing, twirling, winding, flying, floating, laughing, singing and running lightly in rhythmic steps to the gay melody on the Strings. The horns call again; and again the fairies come, myriads and myriads more of them, — tripping, dancing, twirling, winding, flying, floating, laughing, singing and running lightly in rhythmic steps to the gay melody as did the first merry troupe.

Again the Elfin horns! Could anything be more enchanting than those lovely, melting harmonies of the fairy sentinels and little body-guard of Queen Titania?

We seem to have left the Concert Hall now. We are in a beautiful English forest glade where the grass is very green and where the beech trees throw out upon the sward great, long, gnarled and snaky roots covered with emerald moss. And here, on a bank canopied o'er with luscious honeysuckle and sweet musk roses and eglantines, and where the nodding violets and sweet-smelling thyme make us drowsy with their delightful perfume, we see Titania and her tiny Elfin train gather. They charm away the spotted snakes with double tongue, thorny hedgehogs, weaving spiders and beetles black, so that their Queen may

sleep in peace. Off they go on various errands, leaving near the softly-breathing Titania a little fairy sentinel standing on an eglantine and holding a sharp spear of grass. Again we hear the delicate, silvery horns of Elfland; and, with the last lingering chord, the Enchanted Forest vanishes.

These subtle harmonies touched our imaginations and evoked that lovely picture!

The Conductor lays down his *bâton*. All is over!

We have often read in Fairy Tales how only those who had tasted dragon's blood could understand the language of birds and animals.

It is precisely the same with regard to Orchestral music. Only those whose ears are educated can appreciate all its meaning and its beauty. When we taste dragon's blood, so to speak, we understand the language of music and enter into a new world of delight that is closed to the uninitiated.

The Orchestra throws open for us magic casements that look upon a realm beyond that of everyday reality; and the more we know of the Orchestra, the greater will be our power to enter that sphere of enchantment. Therefore, our first step will be to inquire into the history and capacities of the instruments that give the Orchestra its very existence.

## CHAPTER I

# THE VIOLIN

*Charm of the violin; voice of the violin; parts of the violin; construction of the violin; bridge, bass-bar and sound-post; ancestry of the violin; the vielle, or viole; evolution of the violin; corners and bouts; the sound-holes; birthplace of the violin; Brescia; Gasparo di Salò; Maggini and the characteristics of his violins; Efrem Zimbalist's Maggini; Cremona; the Amati family and their violins; Antonio Stradivari; house of Stradivari described by Haweis; the Stradivari violin; the Guarneri; Joseph del Gesù; Carlo Bergonzi; Jacobus Stainer of Absam; importance of wood for violins; Joachim's opinion of the Stradivari violin; strings of the violin; the finger-board and "positions"; harmonics — natural and artificial; portamento; the sordino; the right hand's work; bowing; pizzicato; position of violins in the Orchestra; the First Violin; Lavignac on the violin; Berlioz on use of violins in the Orchestra; François Tourte, the Stradivari of the bow; evolution of the bow; Corelli, Tartini, Tourte, Viotti, Paganini; Tourte's model; the bow of to-day.*

THERE is something very fascinating about a violin. This graceful, delicate instrument, which is a marvel of strength, notwithstanding its frail appearance, is beautiful to look at and its voice is lovely to hear.

It is often said that the voice of a violin is so greatly admired because its tones offer the nearest approach to the human voice; but if you think the matter over you will, perhaps, agree with me that the tones of a beautiful violin do not resemble those of a human voice and that they are infinitely more beautiful in quality. There is a mellowness, a softness, a richness, a liquidity, a glossy clearness and a warmth peculiar to the violin and very far away from anything that the human throat can accomplish.

Let us think of the violin's voice as something individual; and as something delightful and dear to us because it is an individual voice and not because of any fancied resemblance to a high soprano. Indeed, very few of the greatest singers could ever produce such velvety, sweet, poignant, vibrant and insinuating notes as we hear from a luscious Stradivari, a sweet Amati, or a rich Maggini under the bow of a master-violinist.

Everything about a violin appeals to us. There is something so mysterious and ingratiating about the little instrument, neat and trig and curved at the waist, with lines as clean as those of a high-bred race-horse and nerves as tense with excitement, ready to be set quivering at the touch of the bow.

Moreover, the very fact that age improves it, and that the longer it lives the sweeter and richer and lovelier it becomes, gives us almost a feeling of awe towards the violin. This delicate little instrument defies Time and disaster. In that it is superior to man himself: the violin is, therefore, almost superhuman!

How many hands have touched this precious treasure! What scenes has it passed through! How many countries has it visited! How many thousands have listened to its voice!

The violin has outlived them all, generation after generation. If it could only tell us all its experiences and adventures since it was taken down from its nail in a Cremona workshop and pronounced ready for the purchaser who had ordered it!

Romance, romance, romance, and nothing but

FIRST VIOLIN, SYMPHONY SOCIETY OF NEW YORK

*Alexander Saslavsky*

romance, clings around old violins, just like the scent in an old Chinese rose-jar. You cannot get rid of the aroma. And, moreover, you do not want to. This atmosphere of the Past gives enchantment to a violin as it does to a Ming vase.

Then there is something very thrilling in the fact that the violin has a charmed life. Nothing can hurt a violin very much. If it is smashed into a thousand bits, a clever repairer can put all the pieces together again; and the instrument is little the worse for the shock.

Then, too, a valuable old Cremona seems to defy theft. If a thief runs away with one, he has trouble to get rid of it, because few are willing to buy it from him. The pedigree of every famous violin is known; or, in other words, the name of every one of its owners is on record. A fine instrument can be identified eventually.

All violins may look alike to you now; but not after your eyes have been taught to know them. No two violins were ever made that were exactly alike; although, of course, all those that were made by any one maker have, generally speaking, the same characteristics. These characteristics are what one has to learn, in order to become an expert, or a connoisseur. All the celebrated makers gradually developed a "model," as it is called; and experts and connoisseurs can tell almost at a glance from what workshop any instrument came. Not only the model, or pattern, or shape, as we might call it, declares the maker, but every maker had a special varnish. Every maker also had a special way of carving the scroll, or head,

and of cutting the sweeping *f*-holes that give the violin so much expression.

And what would the violin be without these graceful *f*-holes?

It would not only lose its tone, but much of its beauty. These sound-holes are of the utmost importance. Their shape, width and position have all been determined through years — centuries indeed — of experiment.

The whole system by which the sound-waves are set in motion in the *inside* of a violin and the way they cross each other and issue forth from these sound-holes is strange in the highest degree. It is a miracle!

Altogether, the violin is a very charming, fascinating, mysterious, romantic, delightful, and lovable instrument.

Although the violin may appear to your eyes as a very simple instrument, it is really a very complex one.

If I asked you to describe a violin you would probably tell me that it has a back and front, sides and strings. Perhaps you might mention the bridge and, perhaps, you would not think about this small article. Perhaps, too, you might mention the *f*-holes on either side of the bridge. And there you would stop.

You know very little about a violin, or you would speak of the *belly* and not the "front" and of the *ribs* and not the "sides." And you have not mentioned anything *inside* the violin. Perhaps you think it contains nothing!

A violin consists of *seventy* different pieces.

Fifty-seven belong to the construction and thirteen are moveable fittings.

The back (sometimes in two pieces), the belly (sometimes in two pieces), the blocks (six), the ribs (six, sometimes five), the linings (twelve), the bass-bar, the purfling (twenty-four pieces), the nut, the fingerboard, the neck, and the head and scroll (sometimes called the lower nut).

The thirteen moveable fittings are: the tail-piece, the loop, the button, or tail-pin, the screws, or pegs (four), the strings (four), the sound-post and the bridge.

The wood used is of three kinds: maple, or sycamore, for the back, neck, ribs and bridge; pine, or soft deal, for the belly, blocks, linings, bass-bar and sound-post; and ebony for the tail-piece, fingerboard, nuts, pegs and button. The purfling, that narrow edging that outlines the shape of the instrument on both belly and back, is made of thin strips of ebony and maple (sometimes, but not often, whalebone is used).

The parts are put together with the finest glue and invisible joinings. Finally, comes the varnish, which is of the utmost importance.

The violin is, indeed, as a lover of this instrument[1] has said, "a miracle of construction; and as it can be taken to pieces, put together, patched and indefinitely repaired, it is almost indestructible. It is, as one might say, as light as a feather and as strong as a horse. The belly of soft deal and the back of

[1] Haweis.

hard sycamore are united by six sycamore ribs supported by twelve blocks with linings. It appears that the quick vibrations of the hard wood married to the slower sound-waves of the soft wood, produce the mellow but reedy *timbre* of the good violin. If all the wood were hard, you would get the tone light and metallic; if all soft, it would be muffled, or tubby. There is every conceivable variety of fibre both in hard and soft wood. The thickness of back and belly is not uniform. Each should be thicker towards the middle. But *how* thick and shaved thin in what proportion to the sides? The cunning workman alone knows."

And now let us consider carefully the three important and highly mysterious organs of the violin. Yes, I am calling them organs. Perhaps I had even better say organs and nerves. These are the bridge, the sound-post and the bass-bar. The two latter are invisible. The bridge, a delicately cut little arch of maple, or sycamore, higher on one side than on the other, perforated curiously but according to a form learned through the experiments of centuries, has been called the "*tongue of the violin.*" The treble foot of the bridge stands firm and rigid on that part of the belly made rigid by the sound-post. The bass foot of the bridge rests on that part of the body, or belly, which vibrates freely, these vibrations being increased and regulated by the bass-bar. Through this bass foot of the bridge the vibration of the strings is communicated to the belly and thence to the mass of air in the violin. The treble foot of the bridge is *the centre of vibration.* The action of the bridge, however, really depends upon the sound-post.

A LITTLE SAVOYARD IN PARIS WITH VIELLE,
OR HURDY-GURDY

The sound-post has been called "the *soul of the violin.*" It is a little pine stick, a few inches long, about the size of a large cedar pencil. It is placed upright about an eighth of an inch to the back of the right foot of the bridge.

"Through it pass all the heart throbs, or vibrations, generated between the back and the belly. There the short waves and the long waves meet and mingle. It is the material throbbing centre of that pulsating air-column defined by the walls of the violin, but propagating those mystic sound-waves that ripple forth in sweetness upon ten thousand ears." [1]

The bass-bar (or sound-bar) has been called "*the nervous system of the violin.*" It is an oblong piece of wood glued lengthwise to the belly. It runs in the same direction as the strings and acts as a beam, or girder, to strengthen the belly against the pressure of the left foot of the bridge. The bass-bar has to be cut and adjusted to meet the requirements of every violin; and only long experience can determine how *long*, how *thick* and exactly *where* the bass-bar should be made and placed. The fraction of a line makes all the difference in the world.

The bass-bar is the only member, or organ, of the violin's body that has undergone any change since the days of Antonio Stradivari. Owing to the increased pitch (higher tuning) of the present time, the tension, or pull, of the strings equals *eighty* pounds! Think of it — this frail-looking, delicate, little violin stands a strain of eighty pounds!

In Stradivari's time this tension was sixty-three

[1] Haweis.

pounds. So in modern times it has been found necessary to strengthen the bass-bar by giving it extra depth in the centre and adding to its length.

Now we know exactly what happens. This tremendous strain of the strings (equalling eighty pounds) is resisted first by the arch of the belly; then by the ribs, strengthened by the upright blocks and linings; and, lastly, by the supporting bass-bar.

Another change that has been made in the last century is the lengthening of the neck. This was done on account of the increased technique of modern performers. The scroll, or head, remained unchanged.

The scroll is very indicative of the maker. Any expert by looking at the scroll can tell its maker. Truly we can repeat the words of Mr. Gladstone: "to perfect that wonder of travel — the locomotive — has, perhaps, not required the expenditure of more mental strength and application than to perfect that wonder of music — the violin!"

The violin is three hundred years old, and it is the only musical instrument that has remained unchanged during that time! It has seen viols, lutes, spinets and harpsichords go out of fashion; it has seen many wind-instruments disappear and new ones take their places; it has seen a few developments in the harp; and it has seen the birth of the piano. But the model of the violin that was brought to perfection by the old makers of Cremona, particularly Antonio Stradivari, is so beautiful in form and so exquisite in tone that it has been impossible to improve it.

The violin did not spring into existence under the

clever hands of the Italian workmen. It had been developing for a hundred years before the Cremonese makers added their finishing touches. What they did was to take the model that already existed and improve it; and their improvements were so great that they practically made a new instrument of it.

The violin has had a long ancestry. It would take several hours to describe all the peculiar instruments from which it could have been derived. We should have to go back thousands of years, to ancient Egypt and Greece and Phœnicia and even to India. And everywhere we would come across an instrument that is best described as a long box of wood over which a string is stretched, or, in some cases, several strings are stretched.

We date our violin from the Thirteenth Century, a time when many great changes were taking place, when great cathedrals were being built and when Dante was living. Perhaps it would be better to say that the *characteristics* of our modern violin begin to appear about that time — six hundred years ago — when the Troubadours began to flourish in the south of France, in beautiful Provence, the land of roses and nightingales.

The Troubadour, who was a poet as well as a musician and who wrote the words of his songs as well as their melodies, played upon a *viole*, or *vielle*. Another name for it is guitar-fiddle. The instrument was a kind of guitar, fiddle and hurdy-gurdy all in one, as you will see if you look at the picture of the *Little Savoyard in Paris* facing page 14, made in 1827; for the hurdy-gurdy of the wandering player is a sur-

vival of the old *vielle*. Its body was pear-shaped and over it five strings were stretched. The *vielle* was a queer instrument indeed; sometimes it was played with a bow; sometimes it was plucked with the fingers; and sometimes it was played by turning a wheel. It was chiefly used by the Troubadours to support the voice, so it was an accompanying, rather than a solo, instrument. Gradually the *vielle* was made larger; and during this same Thirteenth Century, when there were many new ideas springing up in the world, somebody got the idea of cutting out the sides of the long instrument to form a kind of waist. And this waist was the first step towards our modern violin.

In the Fifteenth Century — two hundred years later — something else happened, — something of importance for the whole future of music. People began to make bowed instruments corresponding to the various kinds of human voices; consequently, these were the treble, or discant, viol; the tenor viol; the bass viol; and the double-bass, or violone.

The next thing that happened — also in this Fifteenth Century — was the invention of corner blocks, which followed naturally from the cutting of the waist, although it took a long time to think of it. You will notice if you look at the illustrations facing pages 22, 24, 30, 34, and 38, that a violin has two sharply projecting points on each of its sides, one at either extremity of the *f*-holes at the waist of the instrument. These sharp corners mark the position of triangular blocks *inside* the violin. These blocks are glued to the back and to the belly of the violin

ST. CECILIA

*By Jan and Hubert van Eyck*

and the ribs of the violin are glued to the blocks. These blocks are the very corner-stones of the construction of a violin; and they add very much to the strength and the resonance of the instrument.

If you look at the violins and other bowed instruments in many old Italian and Flemish paintings you will see that they have only single corners, as, for instance, the large viol the Angel is holding in the picture of St. Cecilia facing page 18. Nobody seems to know whether single, or double, corners came first; but after a time only double corners were used.

The use of these double corners produced something else that was new. This was the curving of the ribs at the waist forming a hollowed-out place called bouts; and these bouts gave the right hand of the player more freedom to move up and down with the bow. Up to this time the position of the performer's hand was stiff and cramped unless there was a tremendously high bridge to carry the strings. So when the ribs were curved and the bouts cut, the player's hand could move more easily and naturally.

But even so, the shape of the violin was not fully determined. These bouts were made according to the idea of every individual maker. They were small and deep in some instruments, long and shallow in others. They were often of enormous size and out of all proportion to the general form of the instrument. Pictures of these old models look very queer to us now.

About the beginning of the Sixteenth Century long and shallow bouts were universally used and

the violin began to take the simple and graceful form with the double corners with which we are familiar. But, notwithstanding all these improvements, we have not yet arrived at our perfect violin. The sound-holes, those two curved openings called *f*-holes, on either side of the bridge, were not yet in their proper place.

These *f*-holes were subject to a great deal of experimenting. Strange to say in the old *vielle*, or *viole*, of the Troubadours they were often very nearly in the place they occupy to-day, that is to say partly in the waist and partly in the lower part of the instrument; but the invention of the bouts displaced them, and, sometimes (indeed very often), they appear right down at the very bottom of the instrument near the tail-piece, as you will see if you look at the picture facing page 70. Makers had an idea that the belly should be left as strong as possible and that the cutting of these *f*-holes made it weaker. At first they used a round sound-hole, like that of a guitar, right in the middle of the instrument. Then they made a pair of crescents, or large C's turned face to face, as you will see if you look at the Angel playing in the picture of St. Cecilia facing page 18; and they liked this so much that they used these C's for a hundred years (in the Fourteenth and Fifteenth Centuries). Then came the "flaming-sword" as in the *viola d'amore* facing page 50; and then the *f*-hole. But at first the *f*'s were placed back to back. Finally, about 1580, the Italian makers cut their *f*-holes front to front.

By the middle of the Sevententh Century, about

the time that our own country was being settled by the English and Dutch, the violin was ready for the great makers to improve it in beauty of outline and qualities of tone.

The violin is, therefore, almost exactly the age of our own country!

The birthplace of the violin is in one of the world's loveliest spots — in the fertile plain of Lombardy, in the northern part of Italy, where the eyes of the traveller that have feasted on emerald meadows and sapphire lakes look upward to the snowy Alps, where grew the pines, maples and sycamores from which the old makers obtained the woods for their instruments. The very trees were saturated with beauty as they grew on the mountain slopes. Is it any wonder that the instruments made from such wood should sing?

In this district and in the Tyrol little colonies of lute-makers and viol-makers had lived and worked for centuries, supplying Europe with such instruments as we find represented in old illuminated manuscripts and described in song and story.

Two towns became especially celebrated for their violins, — Brescia and Cremona.

Brescia was famous for two makers: Gasparo di Salò and his pupil, Giovanni Paolo Maggini.

Gasparo di Salò's real name was Gasparo Bertolotti. He was born in 1542 in the little town of Salò, on the shore of the Lake of Garda, about twenty miles from Brescia.

Brescia was in those days a pretty town, hidden

behind fortified walls with the usual belfry, palace and Cathedral soaring above them. The Cathedral was famous for its music and its fine orchestra. The monks were very friendly with the instrument-makers, who had carried on their art and trade from generation to generation ever since the beginning of the Fourteenth Century. In Brescia Gasparo di Salò settled and became well known for his viols and violins. He probably had many orders from the monks, with whom he was evidently on good terms; for when he was ill, at one time of his life, they took care of him. He made most of his instruments from 1560 to 1610, when he died.

His name is of great importance in the history of the violin. The violins of Gasparo di Salò are the earliest that are known. They are very rare, however. The most famous di Salò was owned by Ole Bull, the great Norwegian violinist. It is now in the Museum in Bergen, Norway. Instead of the ordinary scroll it has an angel's head, which is said to have been carved by Benvenuto Cellini, the gifted silversmith.

"The violins of Gasparo di Salò are of somewhat large build with strong curves and varnished with a dark brown varnish; but their shape corresponds little with that adopted by the great Italian makers. The middle bouts are cut very shallow; the corners project but little and are strongly rounded, while the sound-holes are large and parallel to each other — a feature which is peculiar to the Brescian School. Gasparo selected for his bellies wood of an extraordinary uniformity of regularity of grain." [1]

[1] Abele.

VIOLIN

*By Gasparo di Salò*

By him the present form of the violin was definitely fixed, as you will see by looking at the Gasparo di Salò facing page 22. His tenors and double-basses are superior to his violins and are much sought after.

Maggini was a native of Brescia and worked there from 1590 till 1632, when he is supposed to have died of the Plague. His early violins resemble those of Gasparo di Salò; but gradually the sound-holes grow narrower and by the end of his life Maggini produced violins that were pure in outline and beautifully finished. Moreover, they are famed for their grand, deep, *melancholy* tone. Maggini had learned to be extremely careful in selecting the wood. In early days the Maggini bellies were cut across the grain like Gasparo di Salo's; but, after a while, Maggini cut with the grain like Amati. His sound-holes grew more delicate, but they were bevelled inwards (an idea that the Cremona makers rejected). Maggini violins are also distinguished for their clear, golden-brown varnish and for their purfling, which is usually *double*. Very often Maggini indulged his fancy for ornamentation by twisting the purfling into a graceful clover-leaf pattern on the backs of his violins.

Maggini violins are very rare. The last one to come to light was discovered by Efrem Zimbalist about a year ago. The way it came into his possession is as romantic a story as was ever told about a violin.

Zimbalist happened to be at Lake George. A policeman came to him one day and said: "Mr. Zimbalist, I have an old violin that has been in the garret for about seventy or eighty years. I have just

been offered a hundred dollars for it and I want you to tell me if I shall take it." "Bring the violin to me," said Zimbalist, "and I'll try it." The policeman returned with a dark, dirty old instrument, unstrung and in bad condition. It was not prepossessing, but Zimbalist strung it and tried it.

"I'll give you," he said to the policeman, "a hundred and fifty dollars for it now; and if I find that it is what I think it is, I will give you a hundred and fifty more."

Zimbalist brought the violin to New York and took it to a repairer, who worked over it and at length brought it back to its original state. Delighted with the violin, Zimbalist sent the policeman five hundred dollars. Soon afterwards the violin repairer offered Zimbalist five thousand dollars for it. The old, black, neglected violin had turned out to be a beautiful Maggini.

Not very far away from Brescia is the town of Cremona on the river Po. Cremona! The very name gives us a thrill! The town, though small, was an artistic centre. Its school of painting was nearly as famous as that of Bologna, and in its stately Cathedral just as beautiful music was heard as in the Cathedral of Brescia. The wealthy prelates and learned monks encouraged and trained musicians of the first rank; and naturally there was a great demand for fine instruments. Cremona had long been a rival of Brescia in the production of viols and violins and now that Maggini had made so many improvements, the Cremonese makers were quick to follow,

VIOLIN

*By Maggini*

so quick indeed and so skilful that Cremona went ahead of Brescia and became the centre of violin-making for the whole world from 1560 to 1760 — two hundred years! And it is thrilling to realize that in this little town, in three workshops side by side, on the Piazza San Domenico, *all the great violins of the world were made* and in friendly competition by the three families of Amati, Stradivari and Guarneri.

The Amati family was of good position. Their name goes back in the records of Cremona to the year 1097. The first one of interest to us is Andreas Amati, who was born in 1520 and who died in 1611. He may have been a pupil of Gasparo di Salò and then again he may not. At any rate, his model differs very much from Gasparo's and marks a great advance, although it still retains the stiff, upright Brescian sound-hole. Andreas Amati chose a smaller model with belly and back very high. His outline was very graceful; his scroll beautifully cut; his varnish of an amber color; and he was noted for his *careful selection of wood.* Very few of his works have survived. His sons, Antonio and Geronimo (Antonius and Hieronymus as they are also known), improved on their father's style. To them is due much of the reputation of the Amati violin; for they reduced the outlines to beautiful curves; were careful about the wood they used; and they perfected a rich, clear varnish. These brothers worked together and apart and produced a model that for artistic design and *sweetness of tone* has never been surpassed.

Then came Nicolò Amati (1576–1684), greatest

of them all. He was the son of Geronimo. First he copied the family model and then developed a style of his own, producing an even more graceful outline, a richer and *deeper* varnish and a greater power and clearness of tone, without sacrificing the peculiar sweetness and charm that is characteristic of all the Amati violins. Nicolò, as a rule, made rather small violins, but he also made some large ones. These are known as the "Grand Amatis" and they are very highly prized to-day.

"Most of the Nicolò violins before 1645 are of the smaller pattern, but after this date down to 1684, the year of his death, the eye of a connoisseur will notice an increase in size, a finish in workmanship and a more delicate purfle (never double). The model is still somewhat high in back and belly, but with an increasing tendency to get flatter; the side grooving is less pronounced, whilst the corners are noticeably drawn out into finer points full of character, arresting the eye, lightening, as it were, the model and giving the whole physiognomy of the instrument a piquancy hitherto unattempted." [1]

In his workshop on the Piazza San Domenico Nicolò Amati had many pupils and apprentices. Among them were the Guarneri brothers and Antonio Stradivari.

Everybody has heard of Stradivari, or Stradivarius, for he is often called by the Latin version of his Italian name. Stradivari was the greatest of all violin-makers; and his violins are to-day as valuable as jewels.

[1] Haweis.

CREMONA IN 1830

*By Caporali*

What Stradivari really did during his long and industrious life was to take the model of Nicolò Amati and improve it, searching ever to get *intensity of tone without sacrificing sweetness.* In other words, he was doing just what Nicolò Amati had done before him; and he applied all his life, all his energies and all his thought to this purpose.

"Stradivari's main improvements consisted of (1) In lowering the height of the model, that is, the arch of the belly and in altering this flattened curve to a more uniform arch, so as to afford greater resistance to the pressure of the strings. (2) In making the four corner blocks more massive, in an improved method of dove-tailing the linings at the blocks, and in giving a quarter curvature to the middle ribs, the result of which is to make the curves more prominent in the outline and to increase the tension of the parts. (3) In altering the setting of the sound-holes, giving them a decided inclination to each other at the top, thus following the general upward diminution of the pattern and in fixing the position of the sound-holes relatively to the corner blocks. (4) In making the scroll more massive and prominent, thus rendering it less liable to split at the peg-holes and forming more of a counterpoise in the hand of the player."[1]

Antonio Stradivari came from an old Cremonese family, members of which held public office as early as 1127. There is not much to tell about his life. He was born in 1644 and died in 1737 at the age of ninety-three. When he married in 1667, he left Amati's workshop and opened his own a few doors

[1] Parker.

away. When Nicolò Amati died, he left Stradivari all his tools. By this time Stradivari had bought a house, No. 2, Piazza San Domenico (No. 1, Piazza Roma from 1870 until it was pulled down), and there in the top loft, or garret, he worked so industriously that the people of Cremona had a proverb "rich as Stradivari." No authentic portrait of him is known. According to tradition, he was tall and thin. In winter he wore a white woollen cap and in summer a white cotton one and he always wore a white leather apron over his clothes when he was at work.

Mr. Haweis, some years ago, went on a special search for the house of Stradivari and found it, after much difficulty; for the people of Cremona had forgotten all about the man who made their town famous. However, he succeeded in discovering the house. He takes us directly into this romantic spot: "I stood in the open loft at the top of the house where still in the old beams stuck the rusty old nails upon which he hung up his violins. And I saw out upon the north, the wide blue sky just mellowing to rich purple and flecked here and there with orange streaks prophetic of sunset. Whenever Stradivari looked up from his work if he looked north his eyes fell on the old towers of of S. Marcellino and S. Antonio; if he looked west the Cathedral with its tall campanile rose dark against the sky; and what a sky! Full of clear sun in the morning, full of pure heat all day and bathed with ineffable tints in the cool of the evening when the light lay low upon the vinery and hanging-garden, or spangled with ruddy gold the eaves, the roofs and frescoed walls of the houses. High up in the air

with the sun his helper, the light his minister, the blessed soft airs his journeymen through the long warm days worked Antonio Stradivari."

Stradivari is supposed to have made two thousand instruments! He also made lutes, mandolins and guitars and every detail of his instruments, including the pegs! In those days princes and other rich amateurs ordered their violins; and they would come themselves, or send some important deputy, to the instrument-maker to talk it all over, and, often, indeed, to give the measurements of their arms and bodies so as to get a violin that should be exactely suited to the performer. In those days the best concerts took place in private homes; and the wealthy patron of art liked to own many fine instruments for his own little orchestra to play upon, and still choicer ones for guests, who, in those troublous times of war, rarely took their own valuable instruments travelling with them. Stradivari, like other makers, was frequently asked to supply "a chest of viols," or a "set of instruments." He was, therefore, very busy, filling orders all the time. Meanwhile, he was thinking out, as he filled his orders, the great problem of how to get a more carrying and penetrating tone without sacrificing beauty and sonority. To give an idea of the work he used to have, the King of Poland, in 1715, ordered twelve violins for his court orchestra; then Cardinal Orsini (afterwards Pope Benedict XIII) ordered a violoncello of Stradivari in 1685; and in 1687 the Spanish Court ordered a set of stringed instruments that were ornamented with ivory purfling. One of these found its way into the hands of Ole Bull

and was afterwards sold to Dr. Charles Oldham of Brighton.

Stradivari, in his early period, followed the Amati style, with, however, a freer sweep of the scroll. He began to sign his violins, that is to say to put a label, or ticket, inside of them, about 1700; and from that date to 1725 he created his master-works. He gradually diminished the arch under the bridge and, finally, produced the *flat* model. Stradivari only ceased to work in the last year of his life. For those great violins that are now known by special names, the "Messiah," the "Pucelle," the "Viotti," the "Bossier," the "Dolphin," the "Hellier," and so on, that are now worth fortunes, the maker was paid from fifty to two hundred dollars apiece!

What would old Stradivari say could he know the prices that are given for these violins when they change hands! He would be amazed beyond measure; but his delight would be greater if he could hear the rich tones that are given forth from his instruments mellowed with age. Moreover, violinists did not play in Stradivari's time as they play now. Could the old Cremonese maker see and hear the violins that he made and learned to know and love as they took shape beneath his skilful touch in the hands of Fritz Kreisler or Efrem Zimbalist — what would he think!

An authority tells us that: "After 1690 his individuality began to assert itself, his model became more graceful and flatter, the *f*-holes elegant and reclining, the centre bouts gracefully drawn out, as also the corners; the scroll is bold and striking; the purfling

VIOLIN

*By Antonius and Hieronymus Amati*

rather narrow; and the varnish beautiful golden, or light red. It was at the end of this period that he made the violins known as the 'Long Strads,' so called from their narrowness between the *f*-holes, giving them a lanky appearance, the size varying, and the varnish amber, or light red. The year 1700 brings us to his best period, the model flattish, the wood cut on the quarter and thickest in the centre under the bridge, the curves gentle and harmonious, the wood of the blocks very light, often formed of willow, the scroll perfect in its symmetry. The graceful *f*-holes, the transcendently glorious amber-colored, or ruby, varnish are all characteristics of this epoch of the greatest master's greatest power. His last instruments have the purfling pointed across the corner instead of following it round; and it is not uncommon to find it running completely through the corner. His ticket runs 'Antonio Stradivarius Cremonensis faciebat Anno 17–'. His years of experiment resulted in a neatly compacted instrument with light edges, accurate corners, round arching, broadly treated but exquisitely graceful sound-holes and scroll and a varnish soft in texture which shades deliciously from orange to red. From 1703 until about 1709, the year of those famous violins, the 'Pucelle' and the 'Viotti,' Stradivari seems to have settled upon certain points of construction from which he rarely afterwards departed. In 1711 he made the fine violin known as the 'Parke;' in 1713, the 'Boissier,' which belonged to Sarasate; in 1714, the 'Dolphin;' and in 1715, the 'Gillot' and the 'Alard,' which experts look upon as the master's

finest creations; and in 1716, came the 'Messiah.' No detail of his work was too unimportant for the master's vigilant observation. That he personally designed the pegs, finger-boards, tail-pieces, inlaid patterns, bridges and even the minutest details of his violin cases, is attested by the numerous drawings of these in the Della Valle collection while the several sketches for bow tips and nuts reveal the interesting fact that he also made bows. Generally speaking, the so-called Lost Cremona Varnish was in the writer's opinion no secret in Stradivari's lifetime, but the common property of the lute-makers of the day, who compounded it from the materials used by the great painters of the epoch. Stradivari's own recipe was inscribed on the fly-leaf of a family Bible, but his descendant, Giacomo Stradivari, destroyed this." [1]

Two sons carried on their father's work, but they produced nothing remarkable.

There were five of the Guarneri who were distinguished violin-makers. The first was Andreas, who worked with Stradivari in the workshop of Nicolò Amati. He afterwards developed an original style. The important member was Joseph del Gesù, so called from the "I. H. S." he added to his name on the labels of his violins. Just why he did this nobody seems to know. As he was the son of Gian Battista, he may have humorously wanted to say he was greater than his father. Joseph, or Giuseppe, Guarneri was born in 1687 and died in 1745. His latest productions, from 1740 till his death, are his best. Whether he was a pupil of Stradivari, or not,

[1] Heron-Allen.

matters little. His real master was old Gasparo di Salò; for he revived the bold, rugged outline and the powerful tone of the early Brescian maker, as you will see if you compare the violins facing pages 22 and 38. Joseph del Gesù was searching after *tone;* and he got it. He seems to have led a wild life; and there is a story that once he got into trouble and was locked up in prison and that the jailer's daughter brought him wood and tools so that he could make violins. These violins are called "Prison Josephs"; and, judging from the number of them in the world, Joseph del Gesù must have stayed a long time in prison and have been very industrious while there.

Paganini had a Joseph del Gesù and preferred it to his Stradivari. He always played upon it; and when he died, he left it to the Town Hall in Genoa, where it is still to be seen. It is represented facing page 38.

One more and we shall have finished with the Cremonese makers. This is Carlo Bergonzi, Stradivari's favorite pupil. Carlo lived next door to Stradivari; and when the latter died, he moved into Stradivari's house and lived with the latter's son. First Bergonzi copied the Stradivari model and then he tried for power; so he endeavored to combine the model of Stradivari and that of Joseph Guarneri. The model that he produced is bold, broad and massive and gives a strong, rich, full tone. Bergonzi worked twenty-five years; but only about sixty authentic instruments of his are known. Bergonzi was born in 1712 and died in 1750.

We must not imagine that these makers of whom

we have been talking were the *only* ones at work in Lombardy during these two hundred years. If we take the pains to look at any books on violin-making we will be amazed at the long, long list of Italian makers of lutes and violins. There were about as many of them as there are makers of pianos in the United States to-day.

There were also many German instrument-makers at work, particularly in the Tyrol, where the pines were so plentiful; but the only one of any great reputation is Jacob Stainer, who was born in the little town of Absam near Innsbrück in 1621. He may have gone to Cremona, which was not far away from his home, and have worked there, or he may have just had some models. At any rate, his violins are more like those of Cremona than are those of any other German maker.

Stainer's violins bear a rough resemblance to the Amati violins; but they are very much higher, and the *f*-holes are shorter and are very thick and clumsy. Stainer made twelve violins for the Electors of his country; and these "Elector Stainers," as they are called, are his most famous productions. He died in 1683.

It is said that this old maker used to walk through the wooded slopes of the Tyrolean mountains with a hammer in his hand and that he would knock the trunks of the trees and listen to the vibrations. When he found a tree that suited him, he had it cut down to use in making his instruments.

The question of wood was of the greatest importance. "The wood must be cut only in December

THE HELLIER STRADIVARI

and January and only that part must be used which has been exposed to the sun. You may cut up planks before you find a piece suitable for a really fine back, or belly. Witness the grain of a Stradivari or Amati violin; mark the almost pictorially beautiful health and evenness of its wavy lines, free from all knots, irregularity of growth, studded with symmetrical and billowy veins where the rich sap once flowed. And when the wood is cut it must be tempered and dried, not with artificial warmth but with the slow and penetrating influence of a dry, warm Cremona climate. For no customer, no market could the process be hurried. And the application of the varnish required corresponding care. It was to be perfectly wedded to the rare wood — a companionship destined to last for ages — to outlast so many generations of men and women, was not to be enterprised or undertaken lightly. In the spring when the air got clear and bright and the storms were past, the subtle gums and oils were mixed slowly and deliberately: hours to stand, hours to settle, hours for perfect fusing and amalgamation of parts; clear, white light gleaming from roads strewn with the dazzling marble dust of Lombardy; clear blue sky, warm dry air, and the skill of an alchemist, — these were the conditions for mixing the incomparable Cremona varnish. So deliberately was it prepared and laid on, just where the wood was fit to receive it — laid on in three coats in such a manner as to sink into the dessicated pores and become a part of the wood, as the aromatic herbs and juices become a part of the flesh that is embalmed for a thousand

years. All through the summer did that matchless varnish, which some say contained ground amber and which, at any rate, was charged with subtle secrets, sink and sink into the sycamore and deal plates, until now, when age has rubbed away its clear and agate crust in many places, the violin is found no longer to need that protection, for the wood itself seems to have become petrified into clear agate and is capable throughout its myriad pores and fibres of resisting the worm and even damp and other ravaging influence of ordinary decay." [1]

When Joachim was asked why he preferred a Stradivari to any other violin, he replied: "A Stradivari is a mine of musical sound into which the player can dig and bring out hidden beauties of tone." And then he went on to say: "While the violins of Maggini are remarkable for volume of tone and those of Amati for liquidity, none of the celebrated makers exhibit the union of sweetness and power in so pre-eminent a degree as Giuseppe Guarnieri (del Gesù) and Antonio Stradivari. If I am to give expression to my individual feeling, I must pronounce for the latter as my chosen favorite. It is true that in brilliancy and clearness, even in liquidity, Guarneri is not surpassed by him; but what appears to me peculiar to the tone of Stradivari is a more unlimited capacity for expressing the most varied accents of feeling. The tone seems to well forth like a spring and to be capable of infinite modification under the bow. Stradivari's violins affording a strong resistance to the bow, when resistance is desired, yet responding to its

[1] Haweis.

lightest breath, emphatically require that the player's ear shall patiently listen until it catches the secret of drawing out their tone. Their beauty of tone is not so easily reached as in the violins of many other makers. Their vibrations increase in warmth the more the player, discovering their richness and variety, seeks from the instrument a sympathetic echo of his own emotions: so much so that these violins seem to be living beings and become, as it were, the player's familiars — as if Stradivari had breathed a soul into them in a manner achieved by no other master. It is this which stamps them as creations of an artistic mind, as positive works of art."

We have talked about the construction of the violin and of its great makers; now let us turn our attention to the actual playing of the instrument.

The four strings — G, D, A, and E — are made of catgut [1] and the lowest — the G — is wound with silver. These strings do not run exactly parallel but taper gradually from the bridge to the nut. The nut is a tiny, raised bar of ebony at the extreme end of the fingerboard; and on the nut the strings rest on their way to the pegs. Through each peg a tiny hole is bored. The string passes through that hole and is looped around itself; and then the peg is screwed up, or turned, until the proper note, or pitch, is found. The violin is tuned in fifths.

These four strings give what are called the open notes — G, D, A, and E. The lowest note possible to get from the violin is this open G.

[1] From the entrails of sheep.

On the piano every note is ready and waiting for us to touch. Not so on the violin. Every note (except the open ones) the performer has to make. He has only four fingers to make these notes because his thumb simply helps the hand take its various *positions*. Generally speaking, there are seven positions; for the three still higher ones are rarely used. With each position, the hand is shifted a little higher on the neck of the violin; and the thumb and wrist gradually turn, the thumb from and the wrist towards the face of the player. As the hand creeps up upon the instrument, the fingers come closer together and the notes lie nearer to one another on the strings. The flexible little finger can be extended still further in each position while the position of the wrist and thumb is still retained.

As each finger presses the string tightly and firmly, the player shortens the vibration (or length) of the string and gets a special note. He learns to know his fingerboard and where all the notes lie on the strings with their intervals of whole tones and half-tones; and just what finger to place on these notes if he wants to play in the first, third, or fifth, position,— and so forth. The violinist rarely plays in any one position; but lets his wrist move up and down and his fingers fly all over the fingerboard, playing in all the positions just as he pleases. The player has to have a very accurate knowledge of the fingerboard; and then, beyond that knowledge, a very correct ear so that he may play in perfect tune, or good *intonation*, as it is called. A beginner on the violin finds this task even harder than to learn to

VIOLIN

*By Guarneri del Gesù. Owned by Paganini*

draw a firm, straight, even and liquid bow. He has to listen to every note he produces and test it, as it were, until, after a time, he learns the fingerboard and his fingers drop on the right spots automatically. Of all musicians the players of strings have the most sensitive, accurate and the best trained ears.

On the strings certain other notes are produced called harmonics. At certain places on a string there are nodes, as they are called, where, by lightly touching the string with the finger, over-tones are set vibrating. These are very strange and curious. They sound ethereal and flute-like. There are two kinds of harmonics: natural harmonics and artificial harmonics. The natural harmonics are found on the open strings at certain definite places. There are *five* of these on each string. The artificial harmonics are produced by stopping the string with one finger and touching it lightly with another. These harmonics are harder to master; and they are a great worry to a violinist, because if his violin gets out of tune (drops a little from the heat of a concert hall, perhaps) the proper harmonics cannot be played. The question of harmonics is one that belongs to the science of acoustics and it is a very hard one to understand.

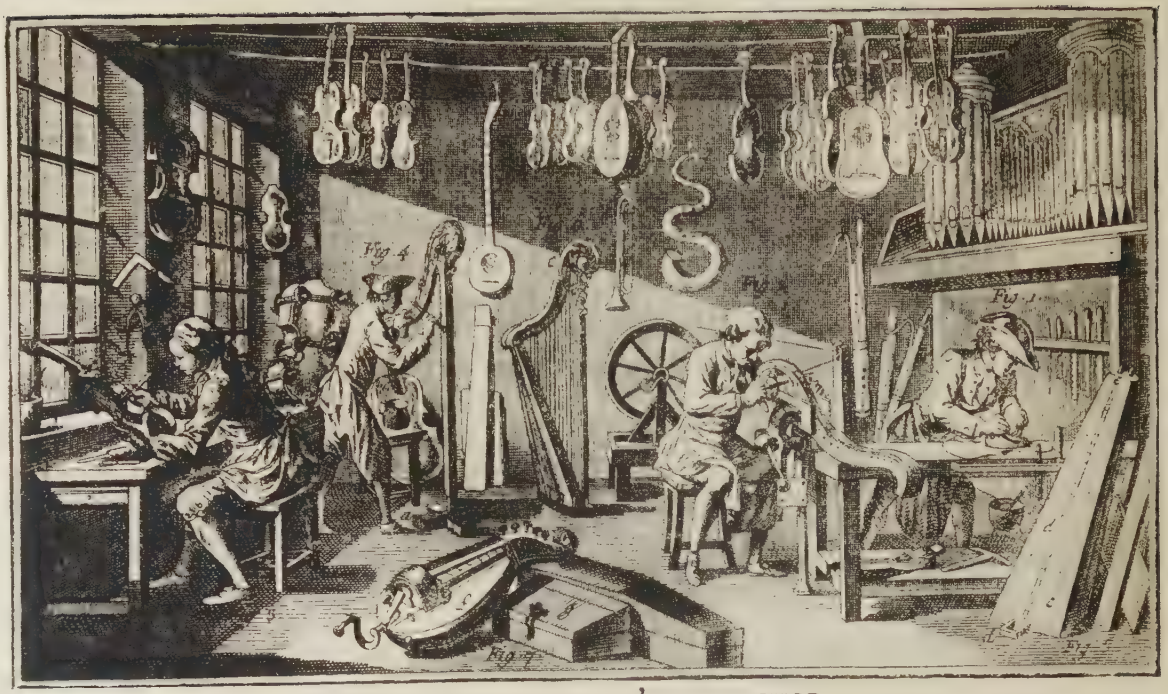
The strings are different in character and quality of tone. The G is very rich and mellow; D and A (particularly D) are sweet and warm; and E is very penetrating. The French call the latter *chanterelle* because it so often sings the melody.

One peculiar charm about the violin is that though each of these strings has an individual character they "carry over" into each other so beautifully

that a good player can pass from one to another smoothly and evenly. He mixes them, as it were, into a lovely whole. In passing from one position to another the violinist often *delicately* slides with his finger up to, or down from, a note. This effect is called *portamento;* and it is one of the charms in violin-playing. Do not think that with his first fingers, the artist slides along the string until he finds the note he wants. Nothing of the kind. He slides up the string with one finger to *nearly the place* he wants and then drops another finger firmly on the right note. But this *portamento* is done so beautifully, so lightly and so swiftly that we never hear a slur, but are only conscious of a lovely and graceful effect.

When the composer wants to produce a very soft and veiled impression he writes on his score for the strings *con sordini.* The *sordino* is a little brass, or wooden, article that looks like a comb. It is placed on the bridge, teeth downwards, to add weight and to deaden the vibrations. You will often see each of the Strings take his *sordino* out of his waistcoat pocket and place it on the bridge of his instrument during the performance of a composition. Very few compositions are played with the *sordino* all the way through.

The left hand of a violinist is, to a certain degree, *mechanical* and trained to get accurate intonation, perfect position and tremendous dexterity. His right hand has another kind of work to do. The bowing of a violinist is what *breath* is to a singer and what *touch* is to a pianist. The beauty and delicacy of tone and the astonishing effects of scattering showers



INSTRUMENT–MAKER'S WORKSHOP

*Eighteenth Century*

of notes about are all the work of the loose wrist, strong and flexible arm and yielding fingers that hold the bow and draw it across the strings.

The rich, velvety, smooth and peaceful *legato;* the detached or short, sharp strokes; the hammered; the jumping; and the harp-like effects, the *arpeggios* (or open chords) swinging back and forth, are all accomplished by the bow. Once in a great while, we hear a strange and weird effect caused by rapping the string lightly with the stick of the bow. But this is only a kind of trick that composers sometimes introduce. Liszt calls for it in his *Mazeppa;* Saint-Saëns in his *Danse Macabre;* and Strauss in *Also Sprach Zarasthustra.*

More often the violins (and other stringed instruments) play *pizzicato,* — that is the violinist rests his thumb against the fingerboard and plucks the strings with the tip of his forefinger.

Beethoven makes an effective use of this in the *Scherzo* of his *Fifth Symphony* and so does Tschaikowsky in the *Scherzo* of his *F-minor Symphony.*

In the Orchestra violins are classified into First and Second, as we have seen, the First Violins sitting on the Conductor's left and the Second Violins on his right hand. They sit two and two, each couple sharing a desk. The First Violins sing the high Soprano and the Second Violins the mezzo-soprano. The First Violin in the whole Orchestra is called the Concert-meister, or Concert-master, or simply the First Violin. Very often he plays an elaborate solo passage.

Before the days of modern Conductors the First

Violin used to be the Conductor of the orchestra, or, we might say, the Conductor played the violin and led the Orchestra at the same time. But although the First Violin has no longer this double duty, his importance in the Orchestra is very great. On him depends the *attack* and phrasing of the first violin and to a certain extent of the entire string Orchestra.

With regard to the position of the violin in the Orchestra let us hear Lavignac: "The violin," he says, "is preëminently a *melodic* instrument,— the splendid *sparkling soprano* of the stringed tribe, the richest in varied effects, the most agile and the most impassioned of orchestral elements."

And now having understood its value as an individual, let us turn to Berlioz to get an idea of its team-work.

"Violins are capable of a host of apparently inconsistent shades of expression. They possess (as a whole) force, lightness, grace, accents both gloomy and gay, thought and passion. *The only point is to know how to make them speak.* Slow and tender melodies are never better rendered than by a mass of violins. Nothing can equal the touching sweetness of a score of first strings made to sing by twenty well-skilled bows. The violin is, in fact, the true female voice of the Orchestra,— a voice at once passionate and chaste, heart-rending yet soft, which can weep, sigh and lament, chant, pray and muse, or burst forth into joyous accents as none other can do. An imperceptible movement of the arm, an almost unconscious sentiment on the part of him who experiences it, producing scarcely any apparent effect when executed

by a single violin will, when multiplied by a number of them in unison, give forth enchanting gradation, irresistible impulse and accents which penetrate to the very heart's core."

Until the bow was perfected there was no brilliant violin-playing as we understand it to-day. It took a long time for the bow to develop. There was a "Stradivari of the bow"; and the name of this person so valuable to the art of violin-playing is François Tourte (see portrait facing page 44). All bows are made on Tourte's model. A real Tourte bow commands a high price.

To understand what Tourte did, we shall have to go back to the early days of the violin and see what kind of a bow the old players used.

The earliest bow with which the *viole*, or *vielle*, and the early violin was played was shaped just like the bow from which an arrow is drawn, — a cord stretched from end to end of a stick. It was a very clumsy affair. In the Thirteenth Century when the violin began to develop as we have seen (see page 17), the bow began to change, too. The first improvement was to make one end blunt and to use hair instead of a cord. The head, or tip, was still sharply pointed. Nothing happened until the time of Corelli, the Italian composer and violinist (1653–1713), who did so much to improve violin-playing. He and others of his time used a straight, short bow, which was not at all elastic, although it was made of light wood. This was a distinct gain, as was also the novel idea of a screw by which the hair could be regulated.

The next change took place in the time of another Italian violinist, Tartini (1692–1770), the one who wrote the *Devil's Sonata*, the melody of which he said the Devil played to him one night in a dream. Tartini used a longer bow than Corelli. It was also thinner and more elastic; but the head of it was still scooped like the ancient ones.

Then, at the end of the Eighteenth Century, François Tourte (1747–1835), worked away making bows, as his father had done before him, until he developed the modern bow. It appeared just about the time of the French Revolution. Like Stradivari, Tourte continued to work till the end of his life. He worked all day in his workshop in Paris, No. 10 Quai de l'École, and on Sundays and holidays he sat on the banks of the Seine fishing, just as they do to-day, and occasionally caught a tiny little fish to the envy of excited rivals around him.

With the stiff, straight, heavy, unelastic bow, the violinist could, of course, produce very few effects. Tourte's improvements almost revolutionized violin-playing. It is said that Viotti, another Italian (1753–1824), and perhaps up to his time the greatest violinist that had appeared, gave Tourte the benefit of his ideas.

It is only by the use of an *elastic* bow that a violinist is able to produce his wonderful effects. Bowing is to the violinist what breath is to the singer and touch to the pianist: *it is only through the bow* that the violinist is able to express his emotions and ideas. So until Tourte's time there was no real *Art of Bowing*, although Tartini wrote a little book on the subject.

FRANÇOIS TOURTE

*"The Stradivari of the bow"*

The world was slow to adopt Tourte's bow; and it was not until Paganini (1784–1840), the Italian wizard, came on the stage that a revolution in violin-playing took place. Paganini used every imaginable movement of the bow and developed the flexibility of the wrist. Then a new School of violin-playing arose and violin-playing gradually developed into what it is to-day.

"Tourte's first experiments are said to have been made from the staves of old sugar hogsheads from Brazil. This is not unlikely. Probably the best slabs of Brazil-wood employed for this purpose had acquired a certain additional elasticity from the combined effect of exposure to tropical heat and the absorption of the saccharine juices.

"It is certain that the greater elasticity which he secured in the stick by the choice and preparation of the wood, enabled him to carry out to the fullest extent the method of *bending the stick of the bow the reverse way*, that is, inwards, and thus to realize what had long been the desideratum of a violinist, — a *bow which should be strong and elastic without being heavy*. By thus increasing and economising the resistance of the stick, he liberated the player's thumb and fingers from much useless weight. By a series of patient experiments he determined the right curvature for the stick and the rule for tapering it gradually towards the point so as to have the centre of gravity in the right place, or, in other words, to 'balance' properly over the strings in the hands of the player. He determined the true length of the stick and the height of the point and the nut, in all which

particulars the bow-makers of his time seem to have erred on the side of excess. Lastly he invented the method of spreading the hairs and fixing them on the face of the nut by means of a moveable band of metal fitted on a slide of mother-of-pearl." [1]

Tourte's violin bows are from 29 to 29½ inches long; a viola bow is 29 inches; and a 'cello bow is from 28½ to 28¾ inches. The stick of a violin bow is made of Brazilian snake wood, or lance wood, reddish and slightly mottled. It is cut straight, following the grain of the wood and then it is slightly bent by the application of heat. The hair, fastened into the tip by a plug, is inserted into the nut of the bow (made of ebony, or tortoise shell); it can be made tighter, or looser, by turning the screw in the nut. There are from 175 to 200 hairs in a bow and these are taken from tails of stallions. White hair is used for the violin, viola and violoncello and black for the double-bass. Rosin is rubbed on the bow to increase its friction.

A violinist takes just as much care of his bow as he does of his violin. When he has finished playing, he wipes his violin carefully with a silk handkerchief before he places it tenderly in the case; then he *unscrews* his bow and places it in the rests in the top of the case.

[1] Parker.

CHAPTER II

# THE VIOLA

*The viol family; the tenor viol; technique of the viola; viola's place in the orchestra; Mozart's use of the viola; Beethoven's use of the viola; Berlioz's "Harold Symphony"; Wagner's use of the viola; viola as treated by modern composers; Berlioz on the viola.*

THE viola is a fifth lower than the violin and an octave higher than the violoncello. Its strings are C, G, D and A. The C string is particularly resonant. The technique is the same as that of the violin; but the bow, though similar in size and shape, is less elastic.

To understand the viola we shall have to go back to the Fifteenth Century to examine a group of instruments that were the ancestors of the present family of Strings.

This was the Viol Family. There were four sizes of instruments. There was the Treble, or Discant (which always played the melody); the *viola da braccio* (played with the arm), or tenor; the *viola da gamba* (the leg viola), the bass viol; and the *violone*, or double-bass.

Another member of this family was the *viola d'amore* (the viola of love), a choice example of which appears facing page 50. It had "sympathetic strings."

These viols were all tuned in thirds, or fourths, instead of fifths, as our modern Strings now tune.

And here we must pause for another moment to

speak of an ancient viol-maker named Gaspard Duiffoprugcar (his name is spelled in many ways), who was born in 1514 and who died in 1570. He lived in that very brilliant period, the Renaissance, when Italian painters were producing magnificent works and when poets and dramatists were writing masterpieces every day. The rich lords and ladies who patronized these artists were very highly cultivated and accomplished; and Music was not the least of their pleasures. Every house of wealth had a collection of fine instruments, though this was before the days of Amati and Stradivari.

Duiffoprugcar lived in the Tyrol in the region of pines, in which instrument-makers had long been settled, and he made lutes and viols all his life. His instruments come so nearly to being violins that he is sometimes called the first maker of violins. But in his hands the violin did not quite reach the form that we find in Gasparo di Salò, who, as we have seen (see page 22) was the true creator of the violin.

Duiffoprugcar's instruments are valued not only because they are old and rare, but also because they are works of art. They are often elaborately inlaid and carved, such as the one facing page 54. Another of his instruments, in the Brussels Conservatory, has the plan of Paris inlaid in colored woods on the back, while the scroll ends in a finely carved horse's head. And still another has inlaid in the back a poetic Latin inscription, which is a riddle that could be applied to any stringed instrument. Translated, it reads as follows:

*"I was living in the forest; the cruel axe killed me. Living, I was mute; dead, I sing sweetly."*

FIRST VIOLA, SYMPHONY SOCIETY OF NEW YORK

*Samuel Lifschey*

The tenor viol was the ancestor of our modern viola. It was the oldest of the viol family. It was very large and very hard to play, because it was so difficult to hold comfortably. But the instrument was too important to be sacrificed to the convenience of the player and the latter had to get along with it as well as he could; for, in the general plan of Mediæval Music, the tenor always sang, or sustained, the melody, or *cantus*. The need for a more manageable instrument to play the leading melody is one of the reasons that brought about the creation of the *little violin* which was destined to sing soprano. But at the time we are talking about there was no violin. This great, big, awkward tenor viol was called *Violino!* Then when the instrument-makers developed the little instrument that we call *violin*, they gave it the name *violino piccolo*, or little violin. The newcomer was really the little tenor viol! Both *violino* (or tenor) and its small companion, *violino piccolo*, were made in great numbers in Lombardy, whence they were sent to the wealthy houses throughout Europe. The makers, as we have seen, began to improve the *violino piccolo* to get more tone out of it. They also tried for sweetness; and the beautiful violin came into being to charm the world. In the meantime, *violinos* were made in two sizes — tenor and alto. After a time these two instruments were combined into one. Then the great, big, awkward tenor viol disappeared and the viola took its place.

Therefore the viola is sometimes referred to as the alto and sometimes as the tenor. Both names are correct.

The viola has been made in many sizes, from the huge instruments by Gasparo di Salò to instruments not much larger than the modern violin. The standard size is now about one-seventh larger than the ordinary violin.

Fine violas are rare. Those by Maggini, of which not a dozen exist, are especially valued. They are of a very high model: the corners short; the purfling double; the sound-holes short, wide, upright, undercut on the inner edge and placed higher than on his violins; the wood is fine; and the varnish is golden brown.

A viola often has "sleepy places," where the notes sound muffled; and it is also apt to have the dreaded "wolf." [1]

It is often said that the viola is too large to be held like a violin and too small to be held like a violoncello.

[1] "In bowed instruments the wolf occurs owing to defective vibration of one or more notes of the scale. When it occurs, it is generally found, more or less, in every octave and on every string. Different instruments have it in different places: it is most common at, or near, the fourth above the lowest note on the instrument, — in the violin at C, in the violoncello at F. The more sonorous and brilliant the general tone, the more obtrusive it becomes: if the tone be forced, a disagreeable jar is produced. Hence it is idle to attempt to play the wolf down; the player must humor the troublesome note. It is commonly believed that there is a wolf somewhere in all fiddles; and it is certain that it exists in some of the finest, for example in Stradivaris. Probably, however, it is always due to some defect in the construction, or adjustment.

"Violins with a soft, free tone are least liable to it. The cause of the wolf is obscure and probably not uniform: it may result from some excess or defect in the thickness; from unequal elasticity in the wood; from bad proportion or imperfect adjustment of the fittings; or from some defect in the proportions of the air-chamber. In the opinion of violin-makers where it is once established it cannot be radically cured. Some instruments have what may be termed an anti-wolf, *i. e.* an excess of vibrations on the very notes where the wolf ordinarily occurs." (Parker).

VIOLA D'AMORE, WITH "FLAMING-SWORD" SOUND-HOLES

So it might be described as a half-and-half way instrument between the two.

Music for the viola is written in the Alto, or C, Clef (on the third line). The highest notes are, however, written in the Treble, Violin, Soprano, or G, Clef.

Important as the viola is in the Orchestra to-day, it was a long time before the beauty of its voice and its technical possibilities were recognized. It was only used to play subordinate middle parts, filling up time and helping along now and then with the bass. Never, *never* was it allowed to lift its sad, melancholy, tragic and religious voice. No matter how longingly it might listen to the other instruments singing a melody, or chattering to one another, it was doomed to silence. No composer would let it speak. Nobody ever dreamed that *it* had anything to say!

*But it was there all the time.* Patient old viola, just used for the *tutti* passages, where every voice speaks, or screams, or cries, at once. Sometimes in rare delight it was allowed to play in unison with the violoncellos, and, more rarely, in unison with the violins.

But Mozart — to whom Music owes so much — *discovered the possibilities* of the viola!

Mozart gave the viola its proper place in the Orchestra, making it something more than a large violin filling up a gap between soprano and bass. He made it important in his *Trios* and lifted it into prominence by writing a Concerto for violin, viola and Orchestra! The next time you hear Mozart's magnificent *Don Giovanni* listen for the viola, when Zerlina is singing her aria, *Vedrai carino.* The viola has a great deal to

say in this tender love song and says it as beautifully and as tenderly as Zerlina herself.

The viola became of great importance in Beethoven's *Trios, Quartets* and *Quintets;* and, to its joy, it was allowed to take a prominent part in the Orchestra! First it was permitted to sing with the violoncellos and bassoons, as in the *Egmont Overture,* and then actually to play with the violoncellos the exquisite melody in the Andante of Beethoven's *C minor Symphony (the Fifth).* The first critics who heard this Symphony noticed to their amazement that the violoncellos gained roundness and purity of tone from their association with the viola!

There are many places in Beethoven's *Symphonies* where the violas are conspicuous; and they are always noble as well as beautiful. The violas also play with the violoncellos in the Choral finale of the *Ninth Symphony.*

Hector Berlioz, always original, did a fine thing for the viola by writing a big solo part for it in his *Harold Symphony,* which describes Byron's wanderings of Childe Harold in Italy. The viola impersonates Childe Harold.

Wagner saw what fine use Beethoven had made of this instrument; and with his wonderful gift for understanding the character, quality and color of every instrumental voice in the Orchestra, Wagner was impressed with the possibilities of the viola.

There are new original passages and splendid melodies for the viola in all of Wagner's music-dramas (a student could find great profit and pleasure by taking the orchestral scores of these works and following the

GASPARD DUIFFOPRUGCAR

viola part from beginning to end), but one instance will suffice to emphasize the important use Wagner made of this instrument.

The next time you hear the Overture to *Tannhäuser* listen for the *motive of the Venusberg!* This phrase, which Lavignac so aptly says "recalls Weber when he is fantastic and Mendelssohn when he is fairylike," is given to the viola! Here in this melodious passage Wagner showed that the quiet, old, sedate viola could be wild, playful and fiery. And Wagner was the first to exhibit the viola in such a *rôle.*

Tschaikowsky's *Pathetic Symphony* has a splendid part for this instrument. Elgar also gives the viola much to do in his works; and Richard Strauss, carrying Wagner's fantastic ideas still farther, made the viola impersonate Sancho Panza in the *Don Quixote Variations,* where he treats it elaborately, whimsically and delightfully.

But very likely none of these composers would have thought about this instrument had it not been for Berlioz, who said: "Of all instruments in the Orchestra the one whose excellent qualities have been longest misappreciated is the viola. It is no less agile than the violin. The sound of its strings is peculiarly telling. Its upper notes are distinguished by their mournfully passionate accent; and its quality of tone, altogether of profound melancholy, differs from that of other instruments played with a bow.

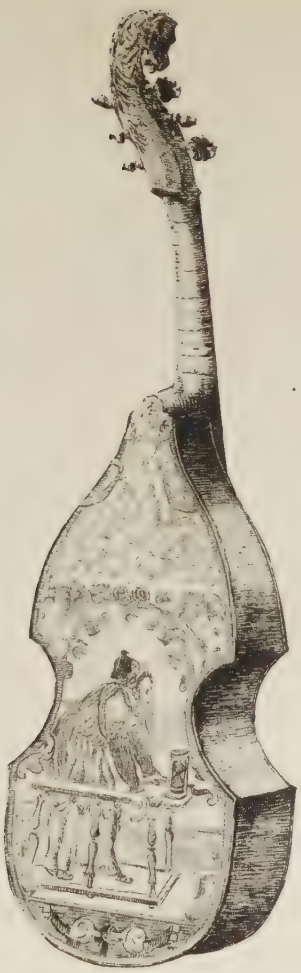
"The viola has, nevertheless been long neglected or put to an unimportant and ineffectual use, — that of merely doubling in octave the upper part of the bass. Its quality of tone so strongly attracts and captivates

the attention that it is not necessary to have in the Orchestra quite so many violas, as second violins; and the expressive powers of its quality of tone are so marked that in the rare occasions when the old masters afforded its display it never failed to fulfil their intentions. *Melodies on the high strings of the viola have a marvellous beauty in scenes of a religious and unique character.*"

These ideas, so new when they were written in the early days of the Nineteenth Century, set composers thinking. They began to realize that they had a color and quality of tone on their orchestral palette of which they had been unaware. The question was how to paint with it. Wagner boldly dashed forth with the *Venusberg motive* and showed how agile and fanciful the viola could be.

To-day the viola's beautiful tone is perfectly understood. "Every skilful violinist can in a few weeks acquire the ability to play the viola fairly well; but the true virtuoso of the viola must study his instrument long and carefully. In like degree as the violin is biting, incisive and masterful, the viola is humble, wan, sad and morose. Besides using it to fill in the harmony composers take advantage of those qualities to obtain expressions of melancholy and resignation for which the instrument is incomparable; for its range of sentiment runs from *sad reverie to agonized pathos.*"[1]

[1] Lavignac.



VIOLA DA GAMBA

*By Gaspard Duiffoprugcar*

CHAPTER III

# THE VIOLONCELLO

*The viola da gamba; violin responsible for the development of the violoncello; instruments of the Seventeenth Century distinguished for their delicacy of tone; Italians the first to appreciate the possibilities of the violoncello; instruments of Andreas Amati; Franciscello, the first great violoncellist; Berteau and Duport; anecdote of Voltaire; Servais; Boccherini; use of the violoncello by great composers; instruments of Bergonzi, Maggini, and, Amati; compass of the violoncello; Lavignac and Berlioz on the instrument and its capacities.*

THE violoncello is not a big violin; it is a little double-bass; and that is why the name is spelled *violoncello* and not *violincello.* Its parent was the *violone;* and, if we remember that the violoncello is the little *violone* in the Viol Family, we will never make the mistake of writing *violincello* for *violoncello.* Almost everyone speaks of this instrument as the 'cello (pronounced chello) except the Italians; for, as the word simply means "little," it has no significance to them.

The violoncello belongs to that ancient and honorable family of viols, already described (see page 47). Its *immediate ancestor* was the *viola da gamba.*

For a long time the *viola da gamba* was the most popular of all bowed instruments. We see it in pictures by the old Italian Masters; and it appears in many pictures by Ter Borch, Metsu and other Dutch and Flemish painters of the Seventeenth Century, who loved to paint pictures of the everyday life that they saw. Dashing men and richly dressed women often

appear with this big instrument in front of their knees, intently taking a lesson from a music-master, or playing to entertain a group of friends in a pleasant living-room.

We recall that Shakespeare in his rollicking comedy of *Twelfth Night* makes someone say of the silly knight, Sir Andrew Aguecheek, that "he plays o' the viol de gamboys."

In every wealthy home in England, as well as on the Continent, there was, as we have seen, a collection of musical instruments for impromptu concerts. The collection consisted first of lutes and viols of all sizes and, at a later period, of violins, violas and violoncellos. Music was one of the entertainments and amusements of society; and it was considered just as necessary to have instruments of all kinds and all sizes to suit the visitors as it is to have a piano in the home to-day. In the Sixteenth and Seventeenth Centuries public concerts were unknown. It was in the churches and cathedrals and in the homes of the rich that artistic music was heard.

The *viola da gamba* was at this time a favorite instrument for ladies; and it seems strange to us that the more delicate violin was not yet considered suitable for them while this awkward, and, to our way of thinking, rather unfeminine *viola da gamba* was thought to be a lady's instrument. However, the *viola da gamba* was not so hard for them to play as the modern violoncello, because the strings were much thinner and a bold, strong tone was not required.

The *viola da gamba* was often made artistic to look at with rich carving and inlay. A beautiful specimen

FIRST VIOLONCELLIST
SYMPHONY SOCIETY OF NEW YORK

*Engelbert Roentgen*

belonging to the University of Edinburgh is shown facing page 60. It once belonged to the violoncellist Servais (see page 61). The back is of rosewood inlaid with ivory. The neck, scroll (carved in the shape of a woman's head with elaborately dressed hair) and the tail-piece (in the shape of Mercury's caduceus) are of ivory. This exquisite instrument is of later date than the *Viola d'amore* facing page 50, for the crescent-shaped sound-holes are of a later period than the "flaming-sword" sound-holes. The *viola da gamba* is rarely met with even in museums; for when the violoncello came into fashion, many people had their *violas da gamba* converted into violoncellos.

Johann Sebastian Bach was the last great composer to write for the *viola da gamba*.

It seems that the violin is responsible for the development of the violoncello. The Italians, always so quick to perceive artistic needs and fitness, soon found out that the newly perfected violin required a more powerful accompaniment than the *viola da gamba* could provide; and so the instrument-makers worked away until they produced the violoncello. This new instrument was mounted with much thicker strings than the *viola da gamba*. It seemed just the thing to the musicians of that time to accompany the very piercing and penetrating tones of the violin, which, although very far from having the resonant qualities of the violin that we know to-day since the development of the bow, seemed very loud indeed to ears that had been accustomed to the sounds of "a concert of lutes, or viols."

The people of the Sixteenth and Seventeenth Cen-

turies understood all the varieties of *tinkle* rather than of *tone*. They liked lovely, soft, gentle music, and they liked instruments such as the *viola da gamba*, and *viola d'amore* strung with "sympathetic strings" set into vibration when the top strings were touched with the bow and that consequently gave forth gentle echoes, like those of the Æolian harp.

We remember the Duke in *Twelfth Night* asks a singer to repeat the music he has just played and sung:

> "*That strain again! it had a dying fall!*
> *O, it came o'er my ear like the sweet sound*
> *That breathes upon a bank of violets,*
> *Stealing and giving odor.*"

We must not despise that quaint and antique music of the Seventeenth Century drawing-room. It was very high-bred, very refined, very delicate and very poetic. It had distinction; it had charm.

But as times changed, manners and tastes changed with them. All of a sudden, so it seems, the instrument-makers, as we have seen, began to search for *tone* and when the sharp, piercing and shrill (so it seemed to the people of the day) violin came into being, other instruments were needed to accompany it. Gradually, one by one, the delicate viols with their thin strings and the tinkling and swishing lutes went out of fashion and were made no longer.

To-day their voices are almost unknown; for the old Viol Family is extinct. We have a new String Quartet that is distinguished for its great carrying tone, — rich, warm, sweet and vibrant.

When it first came into favor, the violoncello was used to strengthen the bass part in vocal music, particularly in church music and also to reinforce the double-bass; but for a long time it made no appearance in the drawing-room. The *viola da gamba* still held the first place in society.

The first instance of a violoncello attracting attention is in 1691, when Domenico Galli of Parma, a famous wood-carver, made a superb violoncello which he presented to Francisco II, Duke of Modena, with a treatise on violoncello as a solo instrument and the art of playing it. Two other Italians in the first half of the Eighteenth Century, Antoniotti of Milan and Lanzetti,[1] violoncellist to the King of Sardinia (1730–1750), brought out compositions which are the first that recognize the capacities of this instrument. The Italians were, therefore, the earliest to develop the violoncello and also the art of playing it.

Andreas Amati (1520–1577)[2] was to the violoncello very nearly what Stradivari was to the violin. He transformed the *viola da gamba* into the violoncello. As early as 1572 Pope Pius V sent Charles IX, King of France, a present of thirty-eight bowed instruments, eight of which were bass. These were all made by Andreas Amati and on the back of each were painted the arms of France and other devices and the motto, *Pietate et Justitia.* In 1790, when the mob broke into Versailles during the Revolution, all these instruments were destroyed except two violins and one violoncello.

[1] Lanzetti appears in the picture facing page 182.

[2] See page 25.

This is still in existence and is known as "The King." Once it was owned by Duport.

The first big solo violoncellist was Franciscello (1713–1740), of whom little is known except that he played in all the important European cities. He took his name from his instrument. It was a new thing for the violoncello to appear in such a conspicious *rôle*.

Corelli and Tartini,[1] the first *great* violinists, often had their accompaniments played on a violoncello; and it is supposed that from associating with the violin, the assisting instrument became ambitious and tried a little virtuosity for himself.

Then the French took it up. They did a great deal for the violoncello. First came Berteau, who died in 1756; and, after him, the still more important Jean Louis Duport (1749–1819), who worked out a system of fingering and bowing and a methodical manner of "shifting" from position to position.[2] Duport's *Essay* on the subject made an epoch in violoncello playing. Duport was a very fine performer. It seems that he was inspired by the playing of the violinist, Viotti,[3] who visited Paris in 1782 and who astonished everybody. This started Duport thinking, just as Paganini's playing a half century later set Liszt thinking. Duport's idea was to imitate the agility and grace and charm of the violin upon his own violoncello. Ever since Duport's time the violoncello has been considered practically a bass violin as far as technique is concerned; and great performers have constantly added some new idea with regard to playing it, until now the

[1] See pages 43 and 44. [2] See page 61. [3] See page 44.

VIOLA DA GAMBA

violoncello in the hands of a Pablo Casals can be as airy and light as a violin even if its voice is heavier. The violoncello has now learned to *sing*. Duport would be astonished if he could hear our violoncellists to-day, though he was one of the best (if not the very best) of his time. Beethoven thought so much of Duport that to him he dedicated his first two Violoncello Sonatas, op. 5.

We can get an idea of the way a violoncello was regarded in the Eighteenth Century by the compliment that Voltaire paid Duport when the latter played for him in Geneva. Voltaire was perfectly astonished by his performance. When Duport laid down his bow Voltaire said: "Monsieur, you make me believe in miracles. You know how to turn an ox into a nightingale!"

Duport was delightfully modest, although everybody acknowledged his greatness and every violoncellist studied his famous *Essay on Fingering and Bowing the Violoncello*. In this he said: "Everybody knows the kind of bowing called *martelé* (hammered), or *staccato*. It is an affair of tact and ease. There are some players who get it at once; others never learn to get it perfectly: *I am one of those.*"

Then came Adrien François Servais (1807–1866), called "the Paganini of the 'cello." He was a native of Brussels. Then Nicholas Joseph Platel (1777–1835), called by Rossini "the King of 'cellists and the 'cellist of Kings." Platel is thought to have invented the peg as a convenient rest, for he was very stout and found his instrument difficult to hold. Then Alfredo Piatti's lovely Amati 'cello and the way he played it

are still remembered by many old American concert-goers, who heard him abroad.

But instrument-makers and performers alone could not have brought the violoncello to its position as a favorite instrument unless the composers had helped.

As Bach had been one of the *last* to write for the old *viola da gamba*, he was one of the *first* to write for the new violoncello. He wrote six famous solos for it.

Handel took great pleasure in the violoncello. He made it play an *obbligato* in several arias in his oratorios and cantatas. Alessandro Scarlatti also wrote for it; and, even better than he, Boccherini (1743–1815), who was a splendid performer himself. His Quartets particularly show it off to great advantage, as was natural to one who could play it so well.

With the development of the String Quartet that was now taking the place of the old "concert of viols," the importance of the violoncello was settled. It only remained for composers to discover its *singing* qualities. Nobody understood these better than Mendelssohn. Next time you hear the oratorio of *Elijah* listen to the 'cello *obbligato* in Elijah's aria *It is Enough*, which is even finer than the beautiful solo accompaniment to *Be thou faithful unto Death* in Mendelssohn's other oratorio, *Saint Paul*.

Rossini's *Overture to William Tell* opens with five solo violoncellos accompanied by two others playing *pizzicato* in first and second parts. Wagner made great use of the violoncello. It is very conspicious in the opening of the third act of *Die Meistersinger*, when Hans Sachs is sitting in his room reading and talking

to himself; and in *Tristan and Isolde* the violoncello speaks love-yearnings as never before.

This leads us to the latest development of the violoncello as a solo performer in the Orchestra. In Richard Strauss's *Don Quixote Variations* the violoncello is made to *impersonate* the mad, chivalrous and pathetic knight, whose adventures are described by the Orchestra. In this work the violoncello and the viola paint *character* as nearly as it is possible for music to do; and if we do not receive a definite idea of their appearance the music conveys to us certain *impressions* of Don Quixote and his unimaginative squire. With great poetic judgment Strauss selected the violoncello and the viola as the most suitable instruments to convey these impressions.

We have been talking about the violoncello all this time. What about the instrument itself?

Perhaps the first thing we notice is that the ribs of the violoncello are very much higher in proportion to its body than those of a violin, or viola. Of course, the height of these ribs differs in different makers. Stradivari made his so low that many of his violoncellos have had to be taken to pieces and wider ribs added to suit the music of to-day. Naturally the sound-post has had to be made taller.

Few of Stradivari's violoncellos are in existence. He made his violoncellos in two models — large and small. The large ones are very scarce. They have a beautiful tone, but they are hard to play on account of their size. Servais had a "Strad." Piatti also had one, which was known as "the red 'cello" on account of its varnish.

The finest Stradivari was owned by Duport and passed into the possession of August Franchomme, who paid 25,000 francs ($5000) for it.

Carlo Bergonzi made superb violoncellos and so did Maggini, who made his on the viola pattern, placing the sound-holes rather high. Andreas Amati and Nicolò Amati both made beautiful instruments, which are characterized by a sweet, mellow tone.

No violoncellos of Joseph Guarneri are known.

The violoncello in the illustration facing page 56 was made by Januarius Galiano of Naples (born about 1740), one of the famous Galiano family of makers, descendants of Alessandro Galiano (1695–1730), a pupil of Stradivari.

The strings of the violoncello are C, G, D and A, an octave lower than those of the viola. The D string is very rich and is considered the most beautiful of all.

The compass of the violoncello is nearly four octaves; and because of this long range composers write for the violoncello in three clefs: the Bass Clef, for the lower and middle registers; the Tenor Clef, for the next highest; and the Treble, or Soprano, Clef, for the top notes.

The beginner on the violoncello has a great deal of hard work to do to learn to play at sight in all three clefs.

In the main, the violoncello is played like the violin and viola, that is to say the player has to make all his notes on the fingerboard; and he can also produce harmonics on the open strings and artificial harmonics by stopping the string at certain

GENTLEMAN OF THE SEVENTEENTH CENTURY
PLAYING THE VIOLA DA GAMBA

places. He sometimes stops these by placing his thumb on the string, — something the violinist never does.

Of course, as the instrument is held in the reverse way from a violin, the high notes are the farthest away from the player. He plays *from* himself, not *towards* himself.

Lavignac writes: "The functions of the Violoncello in the Orchestra are manifold. Usually it gives, reinforced by the double-bass, the bass of the harmony. This is its natural work. But sometimes the singing-part is committed to it, — when, losing its austerity, it becomes a ravishing instrumental tenor, of pure, warm *timbre*, ecstatic or passionate, but always distinguished and captivating. Its rapid and light utterance, the frequent passage from natural notes to harmonics imitating the alterations of chest and head notes complete its resemblance to the human voice. Moreover, the violoncello, though moving in another region and awakening other sensations, possesses a richness of varied tones almost as extensive as that of the violin; and its *pizzicati* are better and less dry than those of the violin."

Regarding the team-work of the violoncello in the Orchestra, Berlioz said: "Violoncellos together to the number of eight, or ten, are essentially melodious; their quality on the upper strings is one of the most expressive in the Orchestra. Nothing is more voluptuously melancholy or more suited to the utterance of tender, languishing themes than a mass of violoncellos playing in unison upon their first string. They are also excellent for airs of a religious character.

The two lower strings, C and G, especially in keys which permit the use of them as open strings, are of a smooth and deep sonorousness; but their depth hardly ever permits a composer any melodies. These are usually given to the upper strings."

CHAPTER IV

# THE DOUBLE-BASS

*Strings and compass of the double-bass; double-bass a descendant of the violone; voice of the double-bass; how Gluck, and Mozart treated the double-bass; Beethoven makes the double-bass a solo instrument; Verdi's use of the double-bass in "Otello"; Wagner's part for the double-bass in "Die Meistersinger"; Dragonetti and Bottesini; double-basses by the Cremonese makers.*

THE double-bass plays the lowest notes of all the Strings. It *doubles*, that is to say, it plays in the lower octave the bass part given to the bass voice, whether this be the violoncello, bassoon, or any other instrument.

Its strings are E, A, D and G. They are very coarse, thick and heavy. The music for the double-bass is written in the F, or Bass, Clef, an octave above the real sound of the notes. This is done to avoid the use of the ledger lines.

To understand what the double-bass is we have to go back to the Viol Family again. We saw that the viol was made in four sizes to make the quartet:—tenor or discant; *viola da braccio; viol da gamba;* and *violone*. We also saw that the violin gradually developed from the tenor viol; that the *viola da braccio* became the viola; and that the *viola da gamba* became the violoncello. Each passed through many changes until the modern instrument was perfected. Strange to say, the double-bass made on the violin pattern did not find favor; and the makers, therefore, went back to the viol type.

So the double-bass is practically the old *violone* with a very few slight changes. It still retains some of the characteristics of the old Viol Family; for instance, its flat back (instead of the new arched back of the new Violin Family) and its slanting shoulders; but it has yielded to the new style in its *f*-holes and its four corner blocks. We may call the double-bass a combination of the models of the violin and the *viola da gamba* and not be far wrong. Compare the double-bass facing this page and the *viola da gamba* facing page 60, and you will see the same slanting shoulders and general form. The double-bass also follows the habit of the Viol Family in being tuned in *fourths* instead of fifths.

If we look at the row of double-basses in the Orchestra, we will notice that some of the men are playing on instruments with three strings and others on instruments with four strings; but the work they have to do is practically the same. It is fascinating to watch the players whose hands move so rapidly up and down the long neck of the instrument and whose fingers fall so intelligently and firmly upon the right places, while the short, thick, black-haired bow looks sometimes as if it would saw the double-bass in two.

We seldom hear a solo from the double-bass; for composers do not encourage him. His voice in spite of his huge size lacks substance.

We cannot imagine the double-bass whispering a tender love-song, or indulging in any sweet sentiment. It is essentially an orchestral instrument. Its heavy notes are for the good of the community. They help

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*Morris Tivin*

make a fine, firm background for the melodies and harmonies of the more delicate instruments.

The best effects of the double-bass are obtained on his open strings; and it can (and often does) produce harmonics.

No composer ever thought of taking any special notice of it until Gluck saw its possibilities and made it imitate the hoarse barking of Cerberus in his opera of *Orfeo*. On the words "At the dire howling of Cerberus," the double-basses are doubled with the violas and violoncellos and make a wonderful effect in depicting the three-headed dog of the lower regions.

Mozart used the double-bass with great skill in *Don Giovanni;* but still there was no call for a solo from the double-bass. Nobody thought of attracting attention to this clumsy old growler, sedate and solemn, often severe, occasionally savage, and, at his best moments, gloomy and vague, until Beethoven gave him greater and greater importance.

The next time you hear Beethoven's *Fifth Symphony* watch for the *Scherzo* and listen to the double-bass. The opening bars of this movement are played as a solo by the violoncello and double-bass. The people who first heard such a strange innovation were aghast and horrified!

But Beethoven made a still stranger and more striking use of the double-bass in the *Ninth Symphony*. Here he employed it with the viola as a kind of bridge leading from the sounds of instruments to human voices. Deeply, darkly, solemnly the voice of the double-bass is heard in an impressive recitative that

seems to call mankind together to hear the message that the human voices have to give. Then begin the words of Schiller's *Ode to Joy*.

Verdi considered the double-bass a dark, morbid personality, particularly fitted for tragedy. He calls upon the double-bass to describe Otello's entrance into Desdemona's chamber when he comes to murder her. Here the double-bass darkly and wickedly mutters all that is in Otello's savage heart and tells us just what he means to do.

But, perhaps, the most striking treatment of the double-bass is in Wagner's *Die Meistersinger*. "In this score," Charles Villiers Stanford thinks, "you find the most economical and perfectly proportionate use of that dangerous rogue-elephant, the double-bass."

Naturally as there are no compositions written for him to shine in the front of the concert stage, there have been few great performers on the double-bass.

There were, however, two very great Italian players. One was Domenico Dragonetti. He was born in 1755. Nothing was too hard for him to play, and he achieved a great reputation. He played in concerts throughout Europe. The other was Bottesini, who was born in 1822. He was also considered a wonder. He played on a three-stringed instrument of rather small size. Bottesini visited the United States with Arditi about seventy-five years ago. Dragonetti played on a Gasparo di Salò. He also owned a Stradivari.

Double-basses by the Cremonese makers are rare. Stradivari made a few and Nicolò Amati made three or four; but Amati's instruments are not effective in the Orchestra. Carlo Bergonzi's are among the best ever

Quisquis amas, cytharaq̃ graves solaris amores,
Ad nostrum tardo non pede tende forum
Alliciantq̃ tuam mea plectra sonantia mentem
Filaq̃ mellifluæ deliciosa Lyræ.

Cujus ubi tenues habili sed pollice cordas,
Inter Apollineas sollicitabis aves,
Annuet alitvum genus, et genus omne ferarum,
Atq̃ tuum cantum sponte sequentur aves
Ergo lyram modico quid pœnitet, ære parare?
Quæ pretium parvi grandi laboris habet

LUTEMAKER'S SHOP AND TWO MEN PLAYING THE DOUBLE-BASS

made; for Bergonzi, as we have seen,[1] was famous for instruments of strong tone and he went back to the Gasparo di Salò model.[2] We also know that the double-bass has to keep to the Viol model; so it is not hard to see why Carlo Bergonzi's instruments are so highly valued.

[1] See page 33. [2] See page 22.

CHAPTER V

# THE WOODWIND FAMILY

*The Woodwind; the reed; the flute; the piccolo; the oboe; the cor anglais; the bassoon; the double-bassoon; the clarinet; the basset-horn; the bass-clarinet.*

THE Woodwind Family consists of instruments that may be described as wooden tubes, or pipes, through which the performer blows, stopping the holes in these pipes with his fingers in order to get various notes. Some of these are furnished with reeds and some are without. It is easy for us to tell the difference when we look at the Orchestra. The flutes are held *horizontally* and have no reeds. All the reed instruments are held by the player in a straight line, *perpendicularly*. The Reed Family is divided into two groups: the oboe group, furnished with a double reed; and the clarinet group, furnished with a single reed. This reed, single or double, placed in the mouthpiece of the instrument, is the "speaking" part. Without it, the instrument could not be played. The reed corresponds to the sound-post of the violin.

The reed is made of the outer layer of a certain kind of grass that grows in the south of Europe. Most of it is obtained from Fréjus on the Mediterranean. The reed is very difficult to fit and the player is very particular about it. If anything goes wrong with the reed, the instrument makes a dread-

ful noise that is called the *couac*, or quack. It is even worse than the wolf [1] on a stringed instrument.

In all woodwind instruments the *embouchure* is important. The *embouchure* is a certain arrangement of the lips by which the performer throws into the instrument all the breath that comes through the mouth without losing any of it and without giving the slightest hissing sound.

### THE FLUTE

If we listen attentively to any piece of orchestral music, we will notice that the voice of the flute is rarely silent. Very often it doubles the first violins in the melody, running along with them smoothly and sweetly. Sometimes it plays an unobtrusive part of its own and every now and then bursts out into a lovely and elaborate solo, when its clear, silvery, liquid notes sound deliciously cool against the warm, vibrant strings. The flute is one of the most agile and flexible instruments in the whole Orchestra. The flute is the nightingale, the thrush, the lark, the oriole, the mocking-bird of the Orchestra. It warbles.

The voice of the flute is gentle; it is ethereal; it is heavenly; it is pure; it is sweet; and it is soothing. Therefore, composers make use of it for poetic and tender sentiment; for scenes of a religious nature; and to suggest beautiful dreams. It is both graceful and poetic and it induces reverie.

"To most persons," Lavignac writes, "as to myself, the ethereal, suave, transparent timbre of the flute, with its placidity and its poetic charm, produces an

[1] See page 50.

auditive sensation similar to the visual impression of the color blue, a fine blue, pure and luminous as the azure of the sky."

The flute is a long tube made in three pieces, or joints, as they are called. The head is one-third the length of the tube; the body carries the keys that produce the scale of D major; and, lastly, comes the foot joint, or tail-joint. The flute is cylindrical and is made of wood or silver. In the silver flute the head-joint alone is slightly conical. In the side of the head there is a large opening, less than an inch below the cork, and *across* this opening the performer blows his breath. On the lower part of the flute are six holes to be stopped at will by the first three fingers of each hand; and three or four levers on the lowest joint furnish additional notes below the regular scale of the instrument.

The performer holds the instrument transversely, sloping downward against the lower lip with the hole, through, or across, which he is to blow turned slightly outward, so that the stream of wind — the "air-stream" it is called — shall strike against the outer edge of this hole. The left hand takes the position nearest the player's mouth. Four open keys are closed by the first, second and third fingers and thumb placed at the back of the instrument. The little finger touches an open key, G-sharp, or A-flat. On the right hand joint are three open keys for the first, second and third fingers, with the accessory, or "shake," keys. The right little finger takes the closed key of D-sharp and the two open keys of C-sharp and C. The G-sharp key is open in some flutes, but generally G-sharp closed key is used by flute-players.

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*George Barrère*

The flute has no reed. Instead of a reed the "air-stream" from the player's lips, thrown against the sharp edge of the hole *obliquely*, produces the sound-waves.

The principle is that each note comes independently out of a separate hole and speaks independently, just as if the rest of the tube were cut off. All keys are open with the exception of G-sharp, E-flat keys — and also the two small trill-keys.

Formerly the flute had no keys, or levers. It merely had finger-holes; but between the years 1832 and 1847 Theobald Boehm, a German, by following some experiments made by Captain Gordon of Charles X's Swiss Guards, worked away until he developed a system of keys, manipulated by means of levers. His invention was so successful that the player has now command of more holes; and, by means of this system, it therefore became possible to play in every key.

The flute stands in this one scale of D-major, so the only way to get higher notes depends upon the breath and lips of the player. "This is the eternal question," says George Barrère, "playing upper octaves does not require *mere blowing* as we can play *forte* in lower octave and *pianissimo* in the upper. The real means of playing upper is *lips*. It is not a secret; but how many flute-players ignore it, making the flute the most disagreeable instrument to hear!" A good *embouchure*, as the whole manipulation of the mouth is called, is esssential to artistic flute-playing. Moreover, the fingers must be raised at equal heights — and not too high.

The player takes a calm, firm, easy, and often graceful, attitude before his desk. Good flute-players also learn a great proportion of their music by heart.

*Staccato* notes and ornamental passages are produced by "single tonguing," and "double tonguing," and "triple tonguing." For different effects the player makes an effort to pronounce certain consonants, *k* or *t* for example; but instead of pronouncing them he blows them off his tongue in a little kind of explosion. But all this is done quickly and with ease by a virtuoso.

The tones of the first octave are rather faint; those of the second octave, produced by exactly the same fingering as those of the first and with a stronger blowing of the breath, are stronger; and those of the third octave, also produced by the same fingering, are more penetrating.

Boehm's explanation is worth quoting to help us understand the production of tone. He says: "The open air-column in a flute's tube is exactly comparable to a stretched violin string. As the string is set into vibration by the bow, the air-column in the flute is set into vibration by the blowing of the performer's breath and management of the lips. As the clear quality of tone of a violin depends upon the proper handling of the bow, so the pure quality of tone of a flute depends upon the direction of the 'air-stream' blown against the edge of the mouth-hole.

"Each octave requires a different direction of the 'air-stream'; and, by increasing the force of the breath, the tone is increased. By 'over-blowing,' each tone can be made to break into higher tones."

Older composers seem to have cared very little

for the flute. They did not have the modern improved Boehm flute. They found that the performer often played out of tune. Cherubini said: "The only thing in the world that is worse than one flute is *two*." Many agreed with him. However, Haydn wrote a trio for flutes in his oratorio of *The Creation* and Handel wrote a beautiful *obbligato* for it in the aria, "*Sweet bird that shun'st the noise of folly*," in *Il Penseroso*, where it imitates the bird. Bach wrote six Sonatas for the flute.

Handel's aria, "*O ruddier than the Cherry*," in *Acis and Galatea*, now played on the piccolo, was originally written for the flute.

Mozart wrote two concertos for the flute and one for flute, harp and orchestra. It is very evident in the *Magic Flute*.

A solo passage in Beethoven's *Leonora Overture, No. 3*, is very famous. In Beethoven's *Pastoral Symphony* it impersonates the nightingale.

Mendelssohn loved the flute dearly. It is very important in his *Midsummer Night's Dream* music. It plays lovely sustained chords in the Overture, a beautiful part in the Nocturne and the Scherzo contains one of the most celebrated passages ever written. He also gave it an exquisite *obbligato* in the quartet *O Rest in the Lord* in the oratorio of *Elijah*.

Wagner has a fine part for the flute throughout the *Meistersinger;* it is important in the *Largo* of Dvořák's *New World Symphony*, where it plays with the oboe; Liszt made it conspicuous in his *Hungarian Rhapsodie, No. 2*; and it sings in the *Morning* of Grieg's *Peer Gynt Suite*.

Berlioz and Tschaikowsky both played the flute themselves and, naturally, their works are full of beautiful melodies for this instrument. Berlioz calls for two flutes and harp for the *Cris des Ismaëlits* in *L'Enfance du Christ.* Tschaikowsky's symphonies are a delight to the flute-player. An exceptionally striking use of the flute is in the *Danse des Mirlitons* and *Danse Chinoise* in the *Nut-cracker Suite.*

Richard Strauss, who always goes a little farther than anybody else, has in the "Windmill" number of the *Don Quixote Variations* called for the "flutter tongue," a new way of rolling the tongue. The name describes it.

Last, but not least, we must recall Gluck. What could be more beautiful than his use of the flute in *Armide,* unless it is to be found in the music of *Orfeo?* All through that beautiful opera the plaintive, tender voice of the flute is conspicuous. Not only does it play melodies for the enchanting ballets and minuets, but its wailing notes tell us of the grief of Orpheus for his adored Eurydice; and when we arrive in the Elysian Fields with Orpheus its pure and ethereal voice, heard in a solo of ravishing beauty, lifts us out of the everyday world we live in and transports us into a realm of blissful peace and enchanting beauty.

In early days the flute was played by holding it straight in front and not horizontally as shown in the picture facing page 74. The German, Quanz, did much to bring the horizontal flute into fashion. One of his most enthusiastic pupils was Frederick the Great, King of Prussia, who is shown in the picture facing this page playing a flute concerto with

FREDERICK THE GREAT PLAYING THE FLUTE

*With his Orchestra at Sans Souci*

his orchestra at *Sans Souci*, taken from an engraving by Chodowieki. The King's favorite greyhounds are the only listeners. Franz Benda is the first violin and Christian Friedrich Fasch, who succeeded Philipp Emanuel Bach (son of J. S. Bach), is playing the harpsichord.

Modern compositions usually call for two flutes and a piccolo.

### THE PICCOLO

The piccolo is the little flute. Properly, it should be spoken of as the piccolo flute, for just as we have seen in the case of the violoncello the word 'cello means little or small, so the word piccolo is an adjective and not a noun. However, people speak of it simply as the piccolo. The piccolo plays the upper octave of the flute. It is less than half the length of the flute and it lacks the "foot-joint." Its compass is over two octaves. Almost every piccolo player can play high B and even C. The music for the piccolo is always written in the Treble Clef, an octave below the real pitch, that is to say an octave below the real sound of the notes. The fingering and technique are exactly the same as for the flute, so anything that can be played on the flute can be played on the piccolo.

It should be noted here that two-thirds of the compass of the flute plays within the compass of a high soprano; now, the piccolo, on the other hand, is nearly always playing in a register higher than that of any human voice. It is the most acute and piercing of all instruments in the orchestra; for even the corresponding notes produced by harmonics on

the violin are far less shrill and penetrating. The piccolo rarely plays in its lower register. Its second octave is bright and joyous; but in this we hardly distinguish it from the flute. What we do notice are the piercing upper notes in quick runs, in chromatic passages and wild screams. Sometimes too, the piccolo can be made to utter something of a diabolical nature.

The piccolo is often used to brighten the upper notes of the other members of the Woodwind Family in all kinds of combinations. This method of using the piccolo might be likened to brightening up an article with gold leaf. We might say that the piccolo sometimes adds a sort of gilt edge to the melody.

Berlioz liked to use it in this way for additional ornamentation, so we hear a great deal of this kind of piccolo gilt-edging, as we might call it, in his works. Berlioz gave it a great deal of thought. "In pieces of a joyous character," he wrote, "the sounds of the second octave are suitable in all their gradations; while the upper notes are excellent *fortissimo* for violent and tearing effects: in a storm, for instance, or in a scene of fierce, or infernal, character. Thus the piccolo flute figures incomparably in the fourth movement of Beethoven's *Pastoral Symphony* — now alone and displayed above the low tremolo of violins and basses, imitating the whistlings of a tempest whose full force is not yet unchained — now on the higher notes still, together with the entire mass of the Orchestra. Gluck in the tempest of *Iphigénie en Tauride* has known how to make the high sounds of the piccolo flute in unison grate still more roughly

by writing them in a succession of sixths, a fourth above the first violins. The sound of the piccolo flutes issuing out in the upper octave, produces, therefore, a succession of elevenths with the first violins, the harshness of which is here of the very best effect.

"In the chorus of the Scythians, in the same opera, the two piccolo flutes double in the octave the little grouped passages of the violins. These whistling notes mingled with the ravings of the savage troop, with the measure and incessant din of the cymbals and tambourine make us shiver.

"Everyone has remarked the diabolic sneer of the two piccolo flutes in thirds in the drinking-song of *Freischütz*. It is one of Weber's happiest orchestral inventions.

"Spontini in his magnificent bacchanalian strain in the *Danaïdes* (since become an orgy chorus in *Nurmahal*) first conceived the idea of uniting a short piercing cry of the piccolo flutes to a stroke of the cymbals. The singular sympathy, which is thus created between these very dissimilar instruments, had not been thought of before. It cuts and rends instantaneously, like the stab of a poignard. This effect is very characteristic — even when employing only the two instruments mentioned; but its force is augmented by an abrupt stroke of the kettledrums joined to a brief chord of all the other instruments.

"Beethoven, Gluck, Weber and Spontini have thus made ingenious use — no less original than rational — of the piccolo flute. But when I hear this instrument employed in doubling in triple octave the air of a

baritone, or casting its squeaking voice into the midst of a religious harmony, or strengthening and sharpening — for the sake of noise only — the high part of the orchestra, I think it a stupid method of instrumentation.

"The piccolo flute may have a very happy effect in soft passages; and it is mere prejudice to think that it should only be played loud. Sometimes it serves to continue the scale of the large flute by following up the latter and taking high notes beyond the flute's command. The passing from one instrument to the other may then be easily managed by the composer in such a way as to make it appear that there is only one flute of extraordinary compass."

Handel used an instrument that corresponded in his day to the piccolo in his wonderful accompaniment to the bass song, "*O ruddier than the Cherry*," in *Acis and Galatea*, where he gives it a pastoral character. He also makes it play an *obbligato* in the aria, "*Husb ye Pretty Warbling Choir*," in the same cantata. He does the same thing again in the aria, *Auguelletti che cantate*, in *Rinaldo*. Meyerbeer gives it much to do in his infernal waltz in *Robert le Diable;* and in Marcel's song "Piff Paff" in *Les Huguenots* it adds brilliancy to the martial effect. Beethoven has a striking place for the piccolo in the finale of his *Egmont Overture;* Verdi makes it heard in Iago's drinking-song in *Otello;* it is conspicuous in the grotesque dances of the dolls in the ballet of *Coppelia* by Delibes; Wagner uses it in his storms, in the *Ride of the Walküre*, and in all his fire-music in the *Nibelungen Ring;* Strauss gives a peculiar trill for it in

*Till Eulenspiegel;* and Berlioz gives it full play in his *Carnaval Romain,* op. 9; and in the Minuet of the "Will o' the Whisps" of his *Damnation of Faust* he calls for *three* piccolos.

Therefore, we might characterize the piccolo as the imp, or demon, of the Orchestra, or the flash of lightning, or the darting flame, or the whisting wind.

### THE OBOE

The Oboe, like the violin, comes from a family of long ancestry. It goes back to ancient Egypt, Assyria and Greece. In the Middle Ages this family was known as the *Bombardo, Bombardino, Bombardi,* or *Chalumeau.* The Germans called this family *Pommers,* which seems to be a corruption of *Bombardi.*

"The Bombardo," writes Carl Engel, "was made of various sizes and with a greater or smaller number of finger-holes and keys. That which produced the bass tones was sometimes of enormous length and was blown through a bent tube like the bassoon, the invention of which it suggested. The smallest instrument, called *chalumeau* (from calamus, a reed) is still occasionally to be found among the peasantry in the Tyrol and some other parts of the Continent. The Germans call it *Schalmei* and the Italians *piffero pastorale.* In England it was formerly called *shawm,* or shalm."

The type of these instruments was a *conical* tube of wood with a bell at one end and a bent metal tube at the other containing a double reed mouthpiece. There was a quartet of them; and the oboe, or *hautbois* (high-wood) was the treble. There was also

an *oboe d'amore* [1] and an *oboe di caccia*, hunting oboe (from which the *cor anglais* is supposed to have been derived), and there were many others. Old writers refer to them as *chalumeau* and *schalmey* and *shawm;* and in such a general and confused way that it is hard to know just which special instrument they are talking about. These old oboes are called for in Bach's scores; but they began to drop out of use in his time. We know, however, that *chalumeau* was the instrument of the old reed band that always played the melody and that from it sprang the oboe of to-day. The instrument went through many changes before it reached its present condition; but none of these affected the family voice — the penetrating, roughish twang. The Bombardino-Schalmey voice still persists: it is like some other famous family traits — the Bourbon nose and the Hapsburg lip for instance — it is hard to suppress. However, it is this peculiar voice that makes the oboe such a desirable member of the orchestra.

"The *timbre* is thin and nasal, very piercing in its *forte* passages, of exquisite refinement in its *piano* passages; harsh and of bad quality in its very high and very low notes. The oboe is artless and rustic in its expression; it is pastoral and melancholy; if it is gay, its gayety is frank and almost excessive and exaggerated; but its natural tone is of a *gentle sadness and a resigned endurance.* It is unrivalled in depicting simple, rural sentiments of any kind, and on occasion can even become pathetic." [2]

[1] Strauss calls for this in his Domestic Symphony.

[2] Lavignac.

FIRST OBOE, SYMPHONY SOCIETY OF NEW YORK

*Henri De Busscher*

The oboe is the most elaborate and complicated of all the reed instruments. The mechanical changes are due to Apollon Marie Rose Barret (1804–1879), a remarkable French oboe-player, aided by a French instrument-maker named Triébert. Historically and musically the oboe is the most important member of the reed band. It is first of all a *melodic* instrument; or, in other words, its tone quality is what it is especially valued for and not for brilliant passages. It can call up pastoral scenes and it can express innocence, grief, pathos and gentle gayety.

The oboe is a wooden pipe, or tube, with conical bore widening out gradually until it forms a small bell, shaped something like the flower of a morning-glory, or convolvulus. At the opposite end it has a small metal tube, or mouthpiece, called "staple," to which the reed (consisting of two blades of thin cane) is attached by means of silken threads. Along the wooden pipe are two "speaker keys," worked by metal rods called "trackers." This reed is the *speaking part* of the instrument.

The oboe is made in three pieces, — the head-piece, bottom and bell-joints. The player first screws the joints of his instrument together so that the finger-holes are in a straight line, and then he puts the reed in the head-piece. The first, second and third fingers of each hand are used to cover the holes. The whole instrument rests on the thumb of the right hand. The little fingers and the thumb of the left hand are used for the keys. The fingers are always placed over the finger-holes ready to close them when necessary. The fundamental scale is obtained by opening and

shutting the holes pierced laterally in the pipe and these are governed by a mechanism called "speaker keys."

The scale of the oboe begins on the middle C and is chromatic. The instrument, being conical, "overblows" an octave. It runs up to the extreme treble G. But although it is a soprano, it is a "middle compass" instrument. Music for it is written from F on the first space of the Treble Clef to D in octave above.

The fingering resembles that of the flute; but, owing to the reed in his mouth, the player can only use single tonguing.

The player puts the reed between his lips, taking care that his teeth do not touch the mouthpiece. Then he places his tongue against the open part of the reed, presses the reed with his lips, draws his tongue gently backwards and blows a stream of air into the oboe, managing his breath as if for singing. Sometimes he pronounces the syllable *doo* and sometimes that of *too*, according to the effect he wants to get.

The double reed in the player's mouth is the sound-producer. The air-column inside the pipe acts as a resonating medium, strengthening the vibrations of the reed by vibrations of its own.

As the player is obliged to take his lips from the mouthpiece to exhale, he cannot perform long sustained passages without pauses. While the oboe does not require as much breath for blowing as some instruments do, the difficulty is to *exhale* and refill the lungs so as to go on with the rest of the work.

The notes are produced by holes, some open, others closed by keys raised by means of levers. The oboe, like the flute, is an octave instrument, that is to say it "over-blows" the octave. The oboe possesses notes sufficient for an octave, or more, with chromatic intervals. The next octaves are obtained by means of cross-fingering and from the octave keys which do not give out an independent note of their own but determine a node in the column of air and so raise the pitch of any other note an octave. The oboe is a "non-transposing instrument" and sounds the note written.

"It is possible to play on this instrument chromatic scales and *arpeggio* passages; *legato* and *staccato;* leaps; cantabile passages; sustained notes; *diminuendo* and *crescendo;* grace notes and shakes."

" The oboe," writes Berlioz, "is especially a melodic instrument. It has a pastoral character full of tenderness, — indeed I might say timidity. Candor, artless grace, soft joy, or the grief of a fragile being suits the oboe's accents: it expresses them admirably in its *cantabile.*

"A certain degree of agitation is also within its powers of expression; but care should be taken not to urge it into utterance of passion — a rash outburst of anger, threat, or even heroism; for then its small *acid-sweet* voice becomes uneffectual and absolutely grotesque.

"Gluck and Beethoven understood marvellously well the use of this valuable instrument. To it they owe the profound emotions excited by several of their finest pages. I have only to quote from Gluck's Agmemnon's air in *Iphigénie en Aulide* 'Can the

harsh Fates?' These complaints of an innocent voice, these continued supplications, ever more and more appealing, what instrument could they suit so well as an oboe? And the celebrated burden of the air of *Iphigénie en Tauride*, 'O Unhappy Iphigénie!'

"Beethoven has demanded more from the joyous accent of the oboe. Witness the solo of the *Scherzo* of the *Pastoral Symphony* and also that of the *Scherzo* of the *Ninth Symphony*, also that in the first movement of the *Symphony in B-flat*. But he has no less felicitously succeeded in assigning them sad, or forlorn, passages. These may be seen in the minor solo of the second return of the first movement of the Symphony in A-major in the episodical *Andante* of the finale to the *Eroica Symphony;* and above all, in the air of *Fidelio*, where Florestan, starving to death, believes himself, in his delirious agony, surrounded by his weeping family and mingles his tears of anguish with the broken sobs of the oboe."

In Beethoven's *Pastoral Symphony* the oboe impersonates the quail and in Haydn's *Seasons* it imitates the crowing of a cock in a long and difficult passage. Perhaps the most beautiful use of the oboe in all music is in Gluck's opera of *Orfeo*, in which it plays an exquisite minuet with the flute and a beautiful ballet with the violin. Schubert uses it charmingly in the second movement of his *Symphony in C-major*.

### COR ANGLAIS

The *cor anglais*, or English horn, differs slightly in appearance from the oboe; but these differences help us to identify it. In the first place, it ends in a kind

of ball; and in the second place, there is a bent crook at the other end that holds the mouthpiece containing the double reed. It is supposed that the word *Anglais* is a corruption of the word *anglé*, meaning bent; for in olden times this instrument was bent at an obtuse angle in the middle of the tube. It is, therefore, more correct to call it *cor anglais* than English horn. The English have had nothing whatever to do with the development of the instrument.

The *cor anglais* is nothing more or less than the alto, or tenor, oboe. It has the same scale and compass as the oboe; but it stands in the key of F, a fifth below that of the oboe. It is, however, unlike the oboe, a "transposing instrument," that is to say, the music does not represent the real sounds. In the case of the *cor anglais* the music is written in a key a fifth above the real sounds. Any good oboe player can play the *cor anglais*, because the technique and fingering are practically the same.

"Its tone," says Lavignac, "is essentially sad, melancholy, sorrowful. The *cor anglais* exactly suits the expression of mental suffering, which is, therefore, especially characteristic of it." "Its quality of tone," says Berlioz, "less piercing, more veiled and deeper than that of the oboe, does not so well as the latter lend itself to the gayety of rustic strains. Nor could it give utterance to anguished complainings. Accents of keen grief are almost beyond its powers. It is a melancholy, dreamy, and rather noble voice, of which the sonorousness has something vague and remote about it which renders it superior to all others in exciting regret and reviving images and sentiments

of the past when the composer desires to awaken the secret echo of tender memories. In compositions where the prevailing impression is that of melancholy the frequent use of the *cor anglais* hidden in the midst of the great mass of instruments is perfectly suited."

The *cor anglais* has been called "an oboe in mourning." Perhaps that will give the best idea of its sorrowful voice.

The *cor anglais* came directly from the alto pommer of the Schalmey-Pommer family.[1] Most probably the *oboe di caccia*, or hunting oboe, was its immediate ancestor. A very good reason for thinking this the case is because in Rossini's Overture to *William Tell* the "*Ranz des vaches*" (calling the cows) was originally given to the *oboe di caccia*, which was still in use in Rossini's time; and when the *oboe di caccia* became obsolete, the part was taken by the newer *cor anglais*.

The *cor anglais* and the oboe assumed their modern appearance about the same time. Both instruments were much changed in construction and mechanism during the last hundred years; but both instruments kept the old family voice, which has a curious harsh quality combined with plaintiveness.

Beethoven wrote a Trio for two oboes and *cor anglais*, op. 29. The French composers made it popular. Meyerbeer has it play an *obbligato* to the aria "*Robert, toi que j'aime*," in *Robert le Diable;* Berlioz made it important in his *Symphonie Fantastique;* and it appears in Dvořák's *New World Symphony*, having a melody in the *Largo* with accompaniment of strings *con sordini*. Strauss gives it prominence in *Heldenleben*.

[1] See pages 83–84.

COR ANGLAIS, SYMPHONY SOCIETY OF NEW YORK

*Attilio Bianco*

Of its famous solos none is so haunting as the plaintive part in Act III of *Tristan and Isolde.* Here the long, sad melody heard on the Shepherd's pipe is entrusted to the saddest voice in the orchestra,—the *cor anglais.*

### THE BASSOON

The bassoon is the bass of the oboe group, holding the same place in this family that the violoncello does in the String Family. It is a descendant of the old bass pommer, the bass of the Schalmey Family; but in the various transformations that took place between 1550 and 1600 the characteristic Schalmey family voice disappeared in the bassoon. The tone-color of the bassoon is quite unlike that of the oboe and that of the *cor anglais,* although it is played with a double reed.

The bassoon is a pipe, or tube, eight feet long conically bored and turned back upon itself so as to reduce its length to about four feet. The instrument consists of five pieces: (1) the bell; (2) the bass, or long joint; (3) the double joint; (4) the wing; and (5) the crook, a small curved tube of metal which holds the mouthpiece with the double reed. The bottom of the instrument is stopped by a flattened oval cork. The pipes meet at the double joint and turn upward. The holes are pierced obliquely so as to bring them within reach of the player's fingers. There are three holes in the wing-joint and three others in the front of the double joint, to be closed by the first three fingers of each hand. A single hole on the back of the double joint is for the thumb of the right hand. The little finger of the right hand

touches two keys; and a series of interlocking keys is on the bass, or long, joint producing the lowest notes of the scale for the left thumb to work.

The player holds the instrument diagonally in the hollow of his two hands, with the left hand uppermost at the level of his breast, and, of course, nearest the bell of the bassoon. The right hand is placed below and behind his right thigh. The double joint of the bassoon rests against the player's knee. The bell of the instrument points upward.

The bassoon stands in the key of G-major and plays an octave lower than the oboe. Its compass is three octaves and a half, the lowest note being B-flat. The music for it is written in the Bass Clef and in the Tenor Clef for the highest notes. Like the flute and oboe, its deep notes are its *fundamental* tones; those of its middle register are second harmonics; and those of its highest register are third, fourth and fifth harmonics. The fingering is the same for all octaves. The higher notes are produced by "over-blowing," so that the air-column in the instrument vibrates differently according to the way the player directs his breath.

"Its lowest tones," writes Lavignac, "are solemn and pontifical, like an organ pedal. Its medium register has a sweet sonority of some richness but little strength; and its high register has the most expression, but is painful, distressed and dejected. At the same time this instrument has comic possibilities. In the medium, and lower registers certain *staccato* notes which have been often used have a certain grotesqueness bordering on awkwardness."

"The bassoon was first used," says Dr. Stone, "in Cambert's *Pomone*, Paris, 1671; but it has gradually risen to the position of a tenor, or even alto, frequently doubling the high notes of the violoncello, or the lower register of the viola. The cause of the change is evidently the greater use of bass instruments, such as trombones and ophicleides, in modern orchestral scores on the one hand and the improvements in the upper register of the bassoon itself on the other. There is a peculiar sweetness and telling quality in these extreme sounds, which has led to their being named 'vox humana notes.' We have good evidence even in Haydn's time that they were appreciated; for in the graceful *Minuet* of his *Military Symphony* we find a melody reaching to the treble A. Haydn uses it as one of the most prominent voices of his orchestra."

Until Mozart's time the bassoon was little else but an instrument for doubling the bass of the Strings; but Mozart did great things with it. He even went so far as to write a Concerto for it. It is important in his operas, particularly *Don Giovanni;* in his *Requiem;* and in his *Symphonies.*

After Mozart fixed its place in the Orchestra, Beethoven brought it forward and made its part so conspicuous and so elaborate that the performers had to set to work to improve their technique. "Beethoven never failed to employ it largely, reinforcing it, in some cases, by the double-bassoon. The *First Symphony* is remarkable for the assignment of subject, as well as counter-subject, in the slow movement to first and second bassoons working independently;

both afterwards joining with the two clarinets in the curious dialogue of the trio between strings and reeds. The *Second Symphony* opens with a prominent passage for the bassoon in unison with the bass strings; in the *Adagio* of the *Fourth Symphony* is an effective figure exhibiting the great power of *staccato* playing possessed by the bassoon; in the first movement of the *Eighth Symphony*, it is employed with exquisite humor and in the *Minuet* of the same *Symphony* it is entrusted with a melody of considerable length. Perhaps the most remarkable passage in Beethoven's writing for this instrument occurs in the opening of the *Finale* of the *Ninth*, or *Choral Symphony*, where the theme of the movement, played by violoncellos and violins in unison is accompanied by the first bassoon in a long independent melody of the greatest ingenuity and interest." [1]

Cherubini gave the bassoon a solo in his opera of *Medea;* Gluck gave it a solo in some of his dance music in *Orfeo;* Rossini opens his *Stabat Mater* with it; and Weber gave it much to do in his operas. Weber wrote a *Concerto* for it and also an *Andante and Hungarian Rondo.* Mendelssohn also was fond of it. Dr. Stone has well summed up his use of this instrument as follows: "Mendelssohn shows some peculiarity in dealing with the bassoon. He was evidently struck not only with the power of its lower register, a fact abundantly illustrated by his use of it in the opening of the *Scotch Symphony* and with the trombones in the grand chords of the Overture to *Ruy Blas*, but he evidently felt with Beethoven the comic and

[1] Dr. W. H. Stone.

BASSOON, SYMPHONY SOCIETY OF NEW YORK

*Ugo Savolini*

rustic character of its tone. This is abundantly shown in the music to the *Midsummer Night's Dream*, where the two bassoons lead the quaint Clown's March in thirds and still farther on in the Funeral March, which is obviously an imitation of a small country band, consisting of clarinet and bassoon, the latter ending unexpectedly and humorously on a solitary low C. In the Orchestra the bassoon also suggests the braying of Bottom. It is worth notice how the acute ear of the musican has caught the exact interval used by the animal without any violation of artistic propriety."

Modern composers have delighted in exhibiting the telling qualities of the bassoon. A notable example is in Tschaikowsky's *Pathetic Symphony* and in the waltz movement of his *Fifth Symphony*. In his *Marche Slave* it is very effective in unison with the violas.

Brahms shows it off well in his *C-minor Symphony;* Strauss in his *Heldenleben, Till Eulenspiegel* and *Don Juan;* and Elgar in his *Pomp and Circumstance March* and Variations III and IX of the *Enigma.*

Wagner gets desolation and sorrow out of it; and, occasionally, humor; and Humperdinck makes comic use of it in *Hänsel and Gretel*, where it frequently comments on what is happening on the stage.

The bassoon gives long sustained notes, shakes and *staccato* notes, which are "dry" and grotesque. The English and French name *bassoon* and *basson* refer to its pitch in the bass; but the Italians and Germans call it *Fagotto* and *Fagott*, because they think in shape it resembles a bundle of sticks, or fagots.

To-day there are usually three bassoons in the Orchestra, — the first and second bassoon and the double-bassoon.

### THE DOUBLE-BASSOON

The double-bassoon is an octave below the bassoon. It doubles the bass of the bassoon as the double-bass doubles the violoncello.

The double-bassoon is a conical wooden pipe of hard wood — often maple — more than sixteen feet long and doubled back four times on itself. The crook, or mouthpiece, into which the double reed is fastened, is much like that of the bassoon; but the metal bell points downwards.

Though the instrument is not a transposing one, the music is written an octave higher than it sounds to avoid the use of ledger lines. Its compass is from the middle C to the deep sixteen-foot C.

The double-bassoon was used in the Orchestra in Handel's time. Haydn calls for it in *The Creation;* Brahms, in his *C-Minor Symphony;* Mendelssohn, in his *Hebrides Overture;* and Beethoven reinforces the march in the *Finale* of his *Fifth Symphony* with it. He assigns it a leading part in the *Ninth Symphony*.

### THE CLARINET

The clarinet is also a descendant of the Bombardino-Chalumeau Family of which, as we have seen, there were so many members. The great difference between the ancestor of the oboe and the ancestor of the clarinet was that the oboe's ancestor was *conical* in bore and played with a *double reed* and the clarinet's

ancestor was *cylindrical* in bore and played with a *single reed.* That fact was the parting of the ways and was destined to make all the difference in the world. It would seem at first that the tone of the two old *chalumeaux* (the one double-reeded and the other single-reeded) was at first much alike; but as time went on and the single-reeded *chalumeau* developed into the modern clarinet, the old rough, reedy voice disappeared for a rich, warbling voice that has more of the bird in it than of the reed.

"The clarinet is one of the most beautiful voices in the orchestra," Lavignac thinks. "It is the richest in varied *timbres* of all the wind instruments. It possesses no less than four registers, perfectly defined; the *chalumeau,* which contains the deepest notes and recalls the old rustic instrument of that name; the *medium,* warm and expressive; the *high,* brilliant and energetic; and the *very high,* biting and strident. All these registers, thanks to the progress of manufacture, are able to melt into one another in the happiest manner possible and furnish a perfectly homogeneous scale. Almost as agile as the flute, as tender as, and more passionate than, the oboe, the clarinet is infinitely more energetic and richer in color."

About 1690 Johann Christopher Denner of Nuremberg added the twelfth key. He bored a small hole nearer the mouthpiece on a *chalumeau* type of instrument, and made a key to it to be manipulated by the thumb of the left hand. By this he increased the compass of the instrument by more than an octave. It may be said that from this date the clarinet came

into existence. From the crude instrument of two keys and seven holes has evolved the present-day clarinet with seventeen keys and twenty-one holes, of which seven are covered directly by the fingers and the others by the keys.

The clarinet is a cylindrical piece of wood, or a tube, about two feet long, ending in a bell. It is made in sections: (1) mouthpiece; (2) barrel joint; (3) left-hand, or upper joint; (4) right-hand, or lower joint; (5) bell. The lowest note is emitted through the bell. The right-hand thumb supports the instrument.

The reed is flat and the mouthpiece is curved backwards to allow of vibration.

The reed is carefully thinned at the point where it vibrates against the curved table of the mouthpiece. The vibration is caused by the air pressure against the reed, thus engendering sound. The air-column in the instrument is shortened, or lengthened, by the opening, or closing, of the holes and keys, emitting high, or low, sounds accordingly. The reed vibrates through the action of the air. The lips of the player merely encompass the reed and mouthpiece, slightly pressing the reed.

Again, to quote from Lavignac: "This instrument, the richest in compass and in variety of timbre of all the wind instruments, is subject to a very special and very curious law. Its tube is absolutely cylindrical and open; and its column of air is set in vibration by a single, flexible reed. Now a peculiarity in pipes of this construction is that the vibrating segment forms, not at the middle point, but at the end where the reed is, so the mode of subdivision of the air-

CLARINET, SYMPHONY SOCIETY OF NEW YORK

*Gustav Langenus*

column is the same as if the pipe were stopped. The clarinet has, therefore, only the harmonics of unequal numbers, which renders its fingering very different from that of the flute, the oboe and the bassoon. It would seem that this might place it below them. On the contrary, this instrument lends itself with admirable suppleness to the expression of all sentiments which the composer may wish to entrust to it.

"Its compass, the greatest possessed by any wind-instrument chromatically, has a great deal to do with giving it this richness of expression; but the diversity of *timbre* belonging to its lower, middle and higher registers must be regarded as the real superiority of the clarinet."

Berlioz says: "The clarinet is little appropriate to the Idyl. It is an *epic* instrument, like horns, trumpets and trombones. The voice is like that of heroic love. This beautiful soprano instrument, so ringing, so rich in penetrating accents, when employed in masses, gains, when employed as a solo instrument, in delicacy, evanescent shadowings and mysterious tenderness what it loses in force and powerful brilliancy. Nothing so virginal, so pure as the tint imparted to certain melodies by the tone of a clarinet, played in the medium by a skilful performer. It is the one of all the wind instruments which can best breathe forth, swell, diminish and die away. Thence the precious faculty of producing *distance*, echo, the echo of *echo*, and a *twilight* sound. What more admirable example could I quote of the application of some of these shadowings than the dreamy phrase of the clarinet accompanied by a *tremolo* of stringed

instruments in the midst of the *Allegro* of the Overture to *Freischütz!* Does it not depict the lonely maiden, the forester's fair betrothed, who, raising her eyes to heaven, mingles her tender lament with the noise of the dark woods agitated by the storm? O Weber! Beethoven, bearing in mind the melancholy and noble character of the melody in A-major of the immortal *Andante* in his *Seventh Symphony*, and in order the better to render all that this phrase contains at the same time of passionate regret, has not failed to consign it to the medium of the clarinet. Gluck, for the *ritornello* of Alceste's air, '*Ah, malgré moi*,' had at first written it for the flute; but perceiving that the quality of tone of this instrument was too weak and lacked the nobility necessary to the delivery of a theme imbued with so much desolation and mournful grandeur, gave it to the clarinet.

"Neither Sacchini, nor Gluck, nor any of the great masters of that time availed themselves of the low notes of the instrument. I cannot guess the reason. Mozart appears to be the first who brought them into use for accompaniments of a serious character, such as that of the trio of masks in Don Giovanni. It was reserved for Weber to discover all that there is of the terrible in the quality of tone of these low sounds."

Mozart was the first to appreciate the beauties and capabilities of the clarinet. He wrote a Concerto for it with orchestra [1] and his *Symphony in E-flat* is so full of prominent work for it that it is often called the "Clarinet Symphony." Beethoven loved it also and developed music for it far beyond Mozart's

[1] Köchel No. 622.

ideas. It sings particularly lovely melodies in the *Larghetto* of the *Second Symphony*. In the *Pastoral Symphony*, where the flute sings the nightingale and the oboe pipes for the quail, the clarinet gives the cuckoo's notes, or, rather, two clarinets together say "cuckoo, cuckoo."

Weber also wrote much chamber-music for the clarinet and gave it dreamy melodies in the *Overture* to *Oberon* and also some difficult arpeggios in company with the flute, known as "drops of water."

Mendelssohn also used the clarinet for the idea of water. It is very evident in the *Hebrides Overture* and in the *Overture* of *Melusine* it suggests the rolling waves. It is conspicuous in Dvořák's *New World Symphony* and it plays a solo in Tschaikowsky's *Francesca da Rimini*.

And how Wagner enjoys it! Often he gives it a motive, or lets it sympathize with what is taking place on the stage! And in the third scene of Act I of *Die Götterdämmerung*, he has two clarinets play a duet for thirty bars!

### THE BASSET-HORN

The basset-horn is a tenor clarinet with two additional keys and a longer bore than the clarinet. The last three notes are worked by the thumb of the right hand. The basset-horn is not a horn. It takes its name from a German maker named Horn, who made a little bass clarinet in 1770 and called it little bass horn as a modest compliment to himself. Its part is written a fifth higher than the actual sounds. Gevaert says its tone is one of "unctuous sweetness";

and those adjectives certainly describe its rich voice very accurately.

The basset-horn was new in Mozart's time and he liked it very much, so much indeed that he gave it an *obbligato* to the aria *Non più di fiori* in his opera of *Clemenza di Tito.* In his *Requiem* he calls for two basset-horns.

### BASS-CLARINET

This instrument is made like the ordinary clarinet only the bell points upward and outward something after the fashion of a big dipper. It is a slow-speaking and hollow-toned instrument. Wagner uses it a great deal. Liszt has a good part for it in his *Mazeppa;* and it is conspicuous in the *Danse de la Fée Dragée* in Tschaikowsky's *Nut-cracker Suite* and also in the *Don Quixote Variations* by Strauss.

The bass-clarinet is doubled by the contrabass clarinet.

The contrabass clarinet is an octave below the bass-clarinet. The tube is partly conical and partly cylindrical. It is over ten feet long, and ends in a big metal bell turned upward like that of the bass-clarinet. It has thirteen keys and rings. It stands in the key of B-flat. The instrument is also called pedal clarinet. Its middle and upper registers are reedy, something like the ordinary clarinet tones, and the lower registers are deep rumbles. It might be described as a rival to the double-bassoon.

DOUBLE–BASS CLARINET
SYMPHONY SOCIETY OF NEW YORK
*Richard Kobl*

CHAPTER VI

# THE BRASSWIND FAMILY

*The horn; the trumpet; the trombone; the bass tuba.*

## THE HORN

LOOK at the golden horn with its open bell gleaming like a big yellow flower!

First notice the large bell that spreads out to a diameter of about twelve inches. Then notice that there is a tube that holds the funnel-shaped mouthpiece. If this long brass tube were straightened out it would be over seven feet long!

This instrument is nothing but a long tube spirally coiled and ending in a bell.

The horn is very old. It is depicted in painting and sculpture in the monuments of Egypt, Assyria and India. It may even be the oldest of all instruments; for it was easier to blow through the horn, or the tusk, of an animal than to cut a reed, or stretch a string.

At any rate, the instrument is derived from the horn, or tusk, of an animal in the small end of which people soon had the idea of placing a mouthpiece for convenience. Even in the Middle Ages the "Olifant," as it was called, was a recognized musical instrument. This was the tusk of an elephant; and it was often exquisitely carved. A few "Olifants" are in existence.

But even though the horn of an animal was used

for many centuries people had imitated it in metal before the Christian Era. The Roman *Bucina*, or *Buccina*, or *Cornu*, for instance, was a brass tube of great length, curved spirally and worn around the performer's body.

The Guilds and Corporations in the Middle Ages had horns which they blew upon to call the members to the meetings. Many of these exist in various museums of Europe.

Poetically we say wind the horn and sound the horn, and Tennyson in *Locksley Hall* writes "Sound upon the bugle horn." More romantic is his line "The horns of Elfland faintly blowing," in the exquisite lyric, beginning "The splendor falls on castle walls," in *The Princess*.

Then there was the hunting-horn — the horn that figures in old ballad literature and romantic tales and legends.

This hunting-horn was a long tube which was passed over the player's right arm, the bell projecting over his left shoulder. It was inconvenient; and so in the Seventeenth Century the tube was wrapped around and around itself and became a great spiral coil with a large bell. But it was still worn around the body so as to keep the hands free.

The hunting-horn was not an instrument, however, that was heard in drawing-rooms, or in the theatre, though it was very musical when echoing through the woods. There was an elaborate code of calls and signals and fanfares, which every huntsman well understood. About 1720 the horn was introduced into the Orchestra. Bach frequently scored for it. An early use of it is in

Handel's opera of *Radimisto*. It was used in France by Gossec, who had to write two airs especially for the *début* of the famous singer and actress, Sophie Arnould (one of the wittiest women of her time), and he actually introduced *obbligato* parts for two horns and two clarinets (which were also new instruments then).

But the horn was not liked: it was considered common, even vulgar. The idea of introducing an instrument from the hunting-field into the opera! Horrors!

After a time, however, people began to like the voice of the horn, though it only played fanfares and flourishes. But few, however, dreamed of writing *music* for this instrument, until Haydn and the great Mozart saw its possibilities and wrote beautifully for it; and they generally called for two horns in their scores. Mozart showed the world what he thought of this instrument by writing *three* Concertos for it with the Orchestra.

Cherubini called for four horns in his opera of *Lodoiska*.

Schubert opened his Symphony in C (No. 9) with a beautiful passage of eight bars for two horns in unison. Mendelssohn made a most poetic and dreamy use of it in the *Nocturne* in *A Midsummer Night's Dream* and Weber has an exquisite introduction for four horns, descriptive of the forest in the Overture to *Der Freischütz*.

"No other composer," writes a critic, "has surpassed, or even equalled, Weber in his masterly use of this instrument. He evidently loved it above all other voices in the Orchestra. Besides abundant concerted

music, the effective opening of the *Overture* to *Oberon*, the weird notes in that of *Der Freischütz* and the lovely *obbligato* in the mermaid's song will rise into immediate remembrance. He fully appreciates its value, not only as a melodic instrument, but as a source, whether alone, or blended with other qualities of tone, of strange and new æsthetical effect." [1]

In his opera of *Preciosa* Weber calls for *eight* horns.

"The horn," says Berlioz, "is a noble and melancholy instrument. It blends easily with the general harmony; and the composer — even the least skilful — may if he choose, either make it play an important part, or a useful, or subordinate one. No master, in my opinion, has ever known how to avail himself of its powers more originally, more poetically, and, at the same time, more completely than Weber. In his three finest works — *Oberon*, *Euryanthe* and *Freischütz* — he causes the horn to speak a language as admirable as it is novel, — a language which Beethoven and Méhul alone seem to have comprehended before him.

"The horn is of all orchestral instruments the one which Gluck wrote least well for. We must, however, quote as a stroke of genius those three notes of the horn imitating the conch of Charon in the air of *Alceste*, 'Charon now calls thee.' They are middle C's, given in unison by two horns in D-major; but the composer having conceived the idea of causing the bells of each to be closed, it follows that the two instruments serve mutually as a *sordino;* and the sounds, interclashing, assume a distant accent and a cavernous quality of tone of the most strange and dramatic effect."

[1] William H. Husk.

HORN, SYMPHONY SOCIETY OF NEW YORK

*Josef Franzl*

The horn that these composers called for in their scores was the hunting-horn to which crooks had been added to enable the performer to play in different keys—pitch. The horn in its natural, or simple, form was used until 1830. After that valves, or pistons, were added and the instrument was known as the chromatic horn.

Played with a mute (*con sordino*) made of cloth, the horn produces a dreamy effect. Walter Damrosch makes a poetic use of the horn, so muffled, in his opera, *Cyrano*.

The horn as we see it to-day consists of a tube bent into a spiral (for convenience of holding), comparatively narrow near the mouthpiece and gradually widening out towards the bell. It might, therefore, be described as a conical pipe. The air-stream blown in by the player runs all through the tube vibrating as it goes all through the coils and emptying out of the bell. There are no holes pierced in it anywhere. The horn has no reed. The lips of the performer have to do all the work.

By changing the pressure of the lips on the mouthpiece the performer can cut up the vibrations into shorter lengths (just as the finger of the player on a violin shortens the vibration of the string) and thus he is able to get the harmonics of the scale.

The "crooks" are moveable pieces of tubing. They are inserted into the coils to alter the pitch. There are "crooks" for all keys.

The natural, or open, tones of the horn are not produced by means of keys that close, or open, the finger-holes, like the clarinet, or oboe. They depend first

on the length of the tube — the longer the tube, the deeper the tone. The length is varied by means of "crooks." Secondly, they depend on the muscles of the lips and the increased pressure of breath — the greater the tension, the higher the tone.

This method of producing notes is called "overblowing." Thirdly, upon the valves, which, when pressed by the fingers, produce notes of lower and higher pitch.

The right hand of the player is always in the bell of his instrument to prevent harsh and loud sounds and to give the tone a smooth and veiled quality.

To play the horn *bouché* means to stop the horn with hand, or fist. To *force* its tone produces a loud, brassy and even wild effect.

Now the *cor à piston*, or French horn, is merely the horn that we have just been describing with the "crooks" *permanently attached.* The performer passes from one key to another by pressing his finger on one, two, or all three pistons. The French horn F is the one most frequently used. It has a complete chromatic scale of three octaves and six notes. The mouthpiece is a funnel-shaped tube of brass, or silver, ending in a rounded ring of metal for the convenience of the lips. The cavity is *cone-shaped* downward, and not cup-shaped; and it is supposed that this shape has something to do with the tone.

Some musicians think the older and simpler horn of Mozart, Gluck and Beethoven more poetic in quality of tone than the modern one.

"The *timbre* of the horn," writes Lavignac, "may be utilized in many ways, but great skill is necessary

to use it to advantage. It is heroic or rustic; savage or exquisitely poetic; and it is, perhaps, in the expression of tenderness and emotion that it best develops its mysterious qualities."

The family of horns is complete; there are horns now in all keys. The music for them is generally written — whatever may be their key, or that of the Orchestra — without sharps or flats at the Clef.

In the Orchestra the horn is seldom played singly. A pair of horns, or four horns (two pairs), are usually employed.

It seems strange that such a primitive instrument should be capable of such poetic effects.

Wagner called for sixteen hunting-horns in the first act of *Tannhäuser* and made an effective use of the valve-horns in the Pilgrims' Chorus in *Tannhäuser*. In the *Siegfried Idyll* he tried the effect of a shake on the horn. In the *Flying Dutchman Overture* he has four horns play in unison. Throughout the *Meistersinger* and the four dramas of the *Nibelungen Ring*, particularly in *Siegfried*, the horns have beautiful work to do. But Wagner outdid himself and everybody else in the music for his horns in the second act of *Tristan*. Here in the beautiful summer night King Mark is hunting; and we hear the faint far-away horns and their echoes ringing through the moonlight and mingling with the soft murmur of the Orchestra. Wagner produced this beautiful result by having six horns play behind the scenes and two in the Orchestra. It is a poetic, musical picture.

Since Wagner's time six or eight horns often play in the Orchestra. Strauss uses them in a very peculiar

way in *Till Eulenspiegel*, in which they play a four-part shake. They are also conspicuous in the *Don Quixote Variations*.

### THE TRUMPET

As far back as the Eleventh Century there was a popular instrument called the claro, clarino, or clarion. It was a short, straight, cylindrical tube made of brass, with a cupped mouthpiece at one end and a bell at the other.

Towards the end of the Thirteenth Century this long tube was folded up and the sections were bound together by an ornamental cord. The word "clarion" was used to denote this new folded instrument and the word "trumpet" was kept for the old straight tube, which still continued in favor.

In the clarion, therefore, we have the ancestor of the modern trumpet. We cannot mistake its voice. Lavignac calls it "a stately and heraldic instrument." That is a good characterization; for when we hear the sound of the trumpet, we picture processions, tournaments and pageants of historic and romantic times.

"To describe it in brief, we may say it is the soprano of the horn family. It has nearly the same harmonic scale, but moves in a region at once higher and more restricted. It differs from the horn in that it produces only the open sounds. Closed sounds are unknown to it; and if attempted would produce only an unpleasant effect.

"Like the horn, the trumpet is a transposing instrument. It has a number of crooks,[1] or lengthening pieces.

[1] See page 108.

TRUMPET, SYMPHONY SOCIETY OF NEW YORK

*Carl Heinrich*

"Of great agility, the trumpet is admirably suited to rapid figures, *arpeggios* and especially to repetitions of notes. Besides noisy fanfares and strident calls, it is able to produce in *piano*, or *pianissimo*, effects either fantastic, or of extreme sweetness."

Berlioz says: "The quality of the trumpet tone is noble and brilliant. It suits with warlike ideas, with cries of fury and vengeance, as with songs of triumph. It lends itself to the expression of all energetic and lofty and grand sentiments and to the majority of tragic accents. It may even figure in a jocund piece, provided the joy assume a character of pomp and grandeur."

"The first improvement in the trumpet," writes Carl Heinrich, "was made by Meyer of Hamburg in the Eighteenth Century. This was a practical mouthpiece. In 1780 Wogel added tubes by which the performer was enabled to play in tune with other instruments. Wiedenger, the court-trumpeter in Vienna (1801), added stops to the trumpet by means of which the player could reach two octaves in chromatic tones. Other improvements were made by German and French players; but it was not until the keys were applied that the trumpet began to approach its present condition. By the use of keys it became possible for the chromatic tones to equal the natural ones, and for the player to perform difficult passages with ease. The first trumpets with keys were manufactured by Sattler of Leipzig. Striegel, who played in the Gewandhaus Orchestra of Leipzig, introduced improvements in the bore and tubing.

"The scores of Bach and Handel often call for many

trumpets. In their day it was necessary to use a number of trumpets of different size, because no one instrument could play all the notes required."

### THE TROMBONE

Contemporary with the clarion, or claro, was a similar instrument called the buysine; and, like the clarion, it was a straight brass tube with a cupped mouthpiece at one end and a bell at the other. The only difference appears to be that the buysine was *enormously* long.

This instrument changed in form; and as early as the Fourteenth Century it was actually supplied with a *slide!* Though it was called *sackbut*, it shows the beginning of our modern trombone.

The sackbut was made in several sizes. There was a whole band of these instruments. In the Sixteenth Century there was a bass sackbut almost identical with the trombone of to-day.

The trombone may be described as a slender brass tube bent twice upon itself and ending in a bell. In the middle section it is double, so that the two outer portions *slide* upon the inner ones. We always enjoy watching the performer on the trombone pulling out his instrument at different lengths; and we often wonder how he knows when to stop it at the right points.

There are *seven* positions for this slide and they have to be learned. There is no guide but the performer's ear, which has to be as accurate as that of a violinist; and, indeed, we may say that the seven positions, in a certain sense, correspond with the positions on the violin. They are only acquired by

constant practice; and when they are once acquired, the performer thinks no more about them but pulls his slide up and down with an air that seems to us almost indifferent.

These seven positions of the slide each give a fundamental tone and its harmonics.

According to an authority: "The slide, being entirely closed, that is to say, the tube reduced to its shortest dimension, the instrument produces (modifying with the breath and the pressure of the lips as in the horn) the harmonics. By pulling out the slide a little, which increases the length of the tube, we have the second position and its harmonics." Pulling out the tube still farther makes the third position and its harmonics; and so on.

There are three varieties of this instrument: the alto, the tenor and the bass. Each is written in the proper key of the voice whose name it bears.

Trombones differ from all other brasswind instruments in that they are non-transposing, and, therefore, render the notes as they are written. The compass of the instrument is two octaves and a sixth.

"The *timbre* of the trombone," writes Lavignac, "is majestic and imposing. It is sufficiently powerful to dominate a whole Orchestra. It produces above all things the impression of power, a power superhuman. For the loudest passages there is no instrument more stately, noble, imposing; but it can also become terrible, or, even *terrific*, if the composer has so decreed; and terrific also in the softest passages. It is mournful and full of dismay. Sometimes it has the serenity of the organ. It can, also, according to

the shades of meaning, become fierce, or satanic; but still with undiminished grandeur and majesty. It is a superb instrument of lofty dramatic power, which should be reserved for great occasions; when properly introduced, its effect is overwhelming."

Mozart understood this reserve. In *Don Giovanni*, for instance, he kept them out of the Orchestra until the scene with the statue. They come in, therefore, in a climax, a terrific and solemn voice from the lower regions calling Don Giovanni to his doom. Mozart also used them very impressively for the March of the priests and to accompany Sarastro, the high priest, in *The Magic Flute*.

Beethoven gave the trombones much to do in the *Ninth Symphony*, where they begin in the Trio of the *Scherzo*. Schubert uses them strikingly in his *Symphony in C;* and Schumann in the Finale of his *First Symphony* and also in his *Manfred Overture*.

Berlioz made a great use of this instrument. He said: "The trombone in my opinion is the true chief of that race of wind instruments which I distinguish as *epic* instruments. It possesses, in an eminent degree, both nobleness and grandeur. It has all the deep and powerful accents of high musical poetry from the religious accent, calm and imposing, to the wild clamors of the orgy. The composer can make it chant like a choir of priests, threaten, lament, ring a funeral knell, raise a hymn of glory, break forth into frantic cries, or sound a dread flourish to awaken the dead, or to doom the living."

As a rule there are three tenor trombones in the Orchestra, but no alto, nor bass.

TROMBONE, SYMPHONY SOCIETY OF NEW YORK

*R. Van der Elst*

### THE BASS TUBA

This huge instrument, with the enormous bell standing upright, with valves and horizontal mouthpiece and great coils of shining tubes, is over three feet long! We can never mistake it; for it is the biggest of all the brass instruments. It has the *deepest notes in the entire Orchestra.* Its compass is immense! Four octaves! Having pistons, it can give sharps and flats. Consequently, it is a chromatic instrument. The sound of its voice is solemn, mysterious and lugubrious. It is very rich in its deepest notes. If we do not try to listen for them we shall not be able to distinguish them from the other bass instruments of the Orchestra.

The tone of the bass tuba might be described as partaking of both the trombone and the organ. Many of the beautiful effects in Wagner's *Nibelungen Ring* are due to this great tuba of five cylinders. Wagner uses it to describe the deep, dark caverns under the Rhine and to suggest the first heavy roll of the waves in *Das Rheingold;* and it is the instrument on which the dragon, Fafner, speaks in *Siegfried.* It is heavy and ponderous like Fafner's own heavy coils; and it is dark and deep and mysterious, just as we imagine a dragon's voice might sound in the forest, where his mutterings and threatenings are understood.

The bass tuba appealed very strongly to Wagner's imagination; and the *Rheingold, Walküre Siegfried,* and *Götterdämmerung* are full of its impressive tones.

The tuba was invented by a German composer, W. F. Wieprecht (1802-1892), with the help of J. G. Moritz.

The bass tuba, like every other instrument, had a direct ancestor. In some families the new generations are nobler and more refined than their ancestors. This is the case with the tuba. As he belongs to the group of horns and trombones, with even a slight relationship to the organ in his deep rolling voice with more velvet in it than even the organ possesses, the tuba might not care to be reminded that his parent is the ophicleide and that he came down in a straight line of ancestry from the rather commonplace and blatant Cornet Family.

The cornet is nothing more nor less than a bugle, a development of the old post-horn. There is nothing elegant, nor distinguished about the cornet (the old *zinke* of Mediæval times). Quite the contrary. But several centuries ago it was used to play the upper part in the Sackbut group;[1] and as there was a bass sackbut, there was no need for a bass cornet.

After a time a French priest, named Guillaume, who was canon of Auxerre, invented the serpent. This was a huge wooden instrument covered with leather pierced with holes on the side and furnished with a big, cupped mouthpiece.

This serpent was *the bass of the cornet family*. It is now obsolete. It is hanging up in the wall in the instrument-maker's workshop facing page 40.

The serpent's place was taken by the ophicleide, which is said to have been invented in 1790, by Frichot, a French musician living in London; but Regibo of Lille had made some improvements in the serpent ten years earlier. Probably Frichot carried Regibo's

[1] See page 112.

improvements a little farther. First, the new instrument was called the serpentcleide; afterwards by a combination of two Greek words, meaning "snake" and "key." Its voice was coarse and the instrument lacked suppleness. Besides, it was difficult for the performer to play precisely in tune. Mendelssohn wrote for it. It goes down into the depths (sixteen-foot A) in *Elijah* and it is used in the Clown's March in *A Midsummer Night's Dream.*[1] Wagner uses it in *Rienzi;* Berlioz, in the Amen Chorus in the *Damnation of Faust;* and Bizet, in *Carmen.*

Taste became too refined for the ophicleide; and its place was taken by the double-bassoon until the bass tuba was brought to perfection. The sonorous, majestic, velvety roll of the bass tuba has very little resemblance to the race from which it came. Today its plebeian origin is forgotten and the bass tuba might be classed as belonging to the trombone, or even to the horn family. It seems a little unkind to remind it of its coarse ancestor, the serpentcleide.

"Minds have been confused," writes Cecil Forsyth, "partly by Wagner's unfortunate misnomer *Tuben* for a family of instruments only one of which is a true tuba and partly by a number of inaccurate descriptions in which the distinction between the whole-tube and the half-tube groups of valve-brass have been overlooked.

"The orchestral godfather of all this group of instruments was Richard Wagner. His intention was to introduce a new tone-color into the orchestra akin to, but different from, that of the horns. The new instru-

[1] Now played on the double-bassoon.

ments were to be (and actually were) *modified horns.* In particular they were to be strong and contrast with the trombones and trumpets and were to have an even compass of about four octaves. Wagner's idea was to write eight horn parts and so arrange the parts for his new instruments that four of his horn-players could be turned over at any time to play them.

"The instruments were to have a bore slightly larger than that of the horns, but much less than that of the tubas. The instruments were to be arranged in two pairs — a small high-pitched pair and a large low-pitched pair. They are all *modified horns*, but Wagner called them *tenor-tuben and bass-tuben.* This group of the so-called Wagner tubas is made up of two distinct types of instruments — a quartet of two high and two low *modified horns* and *one true tuba.*"

This is the bass tuba described above.

BASS TUBA, SYMPHONY SOCIETY OF NEW YORK

*Luca Del Negro*

CHAPTER VII

# PERCUSSION INSTRUMENTS

*The kettledrums; the side-drum; the bass drum; the triangle; the cymbals; the tambourine; the tambourin; the castanets; the carillon, or glockenspiel; the celesta; the xylophone; the wind-machine; the rattle; the anvils; the cuckoo; the bells.*

THERE are two kinds of percussion instruments: those which produce *musical* notes; and those which only make *noise*.

These instruments have neither strings, nor holes, nor keys. They are simply beaten, or shaken.

In his definition of percussion instruments Gevaert subdivides them into two groups: Autophonic Instruments, and Membrane Instruments. Autophonic Instruments are those in which the tone is produced by the vibration of solid bodies (made of metal or wood), and which are of a nature sufficiently elastic to keep up the vibratory motion that has been given to them by the blow from the performer. These include instruments of *definite* pitch, such as bells, *glockenspiel* and celesta; and instruments of *indefinite* pitch, such as the triangle, cymbals, gong, castanets, etc.

Membrane Instruments are those that have a parchment, or skin, stretched, over them. These are the kettledrum, which has a *definite* pitch, and the bass drum, side drum and tambourine, which have *indefinite* pitch.

## THE KETTLEDRUMS

The name of these instruments describes them precisely. We are perfectly familiar with these huge copper kettles that stand at the back of the Orchestra, adding no little to the picturesqueness of the stage.

The kettledrum is a big copper bowl, or basin, across which a piece of parchment is tightly stretched to make the "head." By means of screws with T-heads, the parchment can be tightened, or loosened, and thus the drum is tuned to a musical note of definite pitch. On the bottom of the shell a hole is pierced so that the air may escape when a heavy blow is struck. Otherwise the skin would split when the performer comes down with a vigorous thwack upon the "head" with his stick. Calfskin is usually employed for the "head," and it has to be selected and prepared with great care.

After being soaked in cold water until pliable, the "head" is tucked around the "flesh hoop," and, upon drying, it holds as fast as if it were glued.

Before Beethoven's day one drum played the tonic and the other the dominant (which is a perfect fourth lower). Beethoven did nothing to the kettledrums but change the way they were tuned; and *that* made all the difference in the world. Sometimes, as in the *Scherzo* of the *Seventh Symphony* he tuned them a minor sixth. For the *Ninth Symphony* he had the original idea of tuning them in octaves.

Kettledrums are made in about six different sizes because there are only *four good tones to each drum.* The drums, for instance, in the picture facing page 122,

are: 30 × 20, with compass E-flat to A-flat; 28 × 18, with compass G to C; 26 × 17, with compass A to D; and 25 × 16, with compass C to F.

There are many different kinds of sticks besides the felt-padded. Wooden balls as large as a fifty-cent piece are used for certain effects; ordinary street drum-sticks for very fine crisp rolls, as required by Elgar in his *Variations;* and the sponge sticks for delicate work. There is no end to experimenting with different sticks for different effects.

Mr. Walter Damrosch tells an amusing story about the beginning of the *Scherzo* of the *Ninth Symphony*. It seems that one day when Von Bülow was rehearsing his Orchestra in Florence, the kettledrum player could not get the rhythm crisp enough, nor properly accented. He tried again and again; and still it would not do. At last, Von Bülow called out: "Don't you see? It is *Tim*-pani, *Tim*-pani." And, indeed, the Italian name for these instruments — *Timpani* — gives exactly the right rhythm to this phrase of Beethoven's. The player had no more trouble.

We notice that the performer very often leans over his kettledrums with the deepest concern and bends his ear over them, screwing his instruments up or down, and again bending low and listening as he rubs a finger over the parchment. He is altering the kettledrums so as to get notes that will soon be required; for ever since Beethoven raised the kettledrum to the rank of a solo instrument, composers have not hesitated to require many changes of tuning in the course of a composition, only they are careful to allow the player sufficient bars of rest, so that he may get ready for the new requirements.

The kettledrum can make detached notes, deep rolls, long *crescendos*, long *diminuendos;* and often it murmurs, or mutters, little, soft notes that simply melt into the orchestral effects.

Musicians usually speak of them as "the drums." Kettledrums are of ancient origin. They come from the East. The Crusaders found them in Arabia and introduced them into Europe in the Thirteenth Century, when they were called "nakers" from their Arabian name, *naggareh.* Henry VIII used them in his cavalry regiment. One was placed on each side of the horse's neck.

### THE SIDE DRUM

The side drum, or "snare drum," is the military drum. It is used, however, in the Orchestra for many rhythmic effects. The cylindrical "shell" is of brass; and at each end is a parchment "head," held down by a small hoop, which is, in its turn, held in place by a still larger hoop. Cords with leather tags keep the "heads" taut.

The upper head, on which the drummer plays, is called the "batter head." The lower one is called the "snare head."

Across the "snare head" the "snares" are laid. These are thin strings of catgut, something like violin strings, and they are stretched back and forth from nuts to screws. They have to be screwed down rather tightly. There may be two or three "snares" only and there may be a dozen.

When the player hits the "batter head," the vibrations start others in the air that is inside the shell. These internal vibrations excite the "snare head"

KETTLEDRUMS, SYMPHONY SOCIETY OF NEW YORK

*Karl Glassmann*

and then the "snares" begin to rattle. Consequently, a great racket is set up, which might be described as a peculiar "crackling" tone.

The "side drum" is a very hard thing to play well. The technique is not founded on a single stroke, but on a double alternate stroke with each hand. It is played with a wooden drumstick in each hand.

In the roll, called the "Long Roll," or "Daddy Mammy," the drummer strikes the "batter head" left-left, right-right, left-left, right-right and so gets a kind of rebounding stroke.

In addition to the roll, there are two other strokes: the *flam*, a short note before a longer one; and the *drag*, a sort of roll preceding a note — buddledee DUM! buddledee DUM!

### THE BASS DRUM

The bass drum is a large wooden shell, like a big cylinder over both ends (or "heads") of which parchment (or skin) is stretched. This parchment is held down by hoops. The player loosens, or tightens, these "heads" by means of an arrangement of leather braces and tags working on a cord that is zigzagged around the cylinder.

The bass drum is struck with a stick ending in a soft, round knob. The bass drum may be used for noisy moments to imitate the firing of guns and the roll, or crash, of thunder and also to mark *crescendos* and climaxes. If played very softly, it is solemn and awe-inspiring.

The bass drum always stands sideways. The larger the drum, the more sonorous are the sounds.

### THE TRIANGLE

The Triangle is a steel rod bent in a three-sided shape and left open at one angle. It is about seven inches each way and not quite an inch thick. It is hung by a string at the upper angle. This string the performer holds in his fingers so that the triangle hangs loosely. The performer hits the instrument with a small spindle-shaped bar of steel, called a "beater."

The sound is clear as crystal. Sometimes it even seems silvery. It can play from the lightest *pianissimo* to the loudest *fortissimo*. The pitch is indefinite. Thus the triangle can be used in all keys and with all chords. In addition to simple notes, isolated notes and little groups of notes, the triangle can play the most complicated rhythms and even a *tremolo*.

Mixed with soft strings and woodwind instruments, the triangle is of charming effect.

Liszt made almost a solo part for this instrument in the accompaniment to his Concerto for the Pianoforte in E-flat.

Widor said: "At the climax of a *crescendo*, when the Orchestra would seem to have reached the height of intensity, the introduction of the Triangle converts red heat into white heat."

Thus the Triangle seems to say the very last word.

### THE CYMBALS

Like the triangle, cymbals are used to accentuate a climax, but more vigorously than that little instrument.

Cymbals are round thin plates, or disks, of copper,

or brass, slightly concave in the centre. On the outer side of each plate a strap is attached for the convenience of the player. There are several ways of striking the cymbals. They may be clashed together with a kind of brushing movement, called the "two plate stroke," which is the ordinary way of playing single notes; then there is a second way of rubbing the plates together; then there is the "two plate roll," which can be done loudly or softly; and, finally, the player can hang up one cymbal and beat it with a stick as if it were a gong.

Cymbals were known to the ancient Egyptians, Greeks and Romans; but they were chiefly used by the dancing-girls. The ancient cymbals were much smaller than ours.

### THE TAMBOURINE

The tambourine is at least two thousand years old!

It is a wide, wooden hoop, over which a parchment, or vellum, head is stretched, which can be tightened, or loosened, by means of small rods, or nuts. The other side is left open. The tambourine, therefore, looks not unlike an old-fashioned flour-sifter.

Around the hoop, at intervals, are hung several pairs of little metal disks, or plates. These jingle whenever the tambourine is struck or shaken. Hence, they are called "jingles," or "bells."

The tambourine can be played in three different ways: (1) by striking the head with the knuckles, which gives detached notes and simple rhythmical groups of notes; (2) by shaking the hoop, which gives a rolling noise to the "jingles"; and (3) by rubbing the head of the tambourine with the thumb, which

produces a queer, hollow, rushing, swishing kind of noise accompanied by the roll, or tremolo, of the "jingles."

The tambourine is used in the Orchestra to give "local color," especially to folk-music of Spain and Italy; to "gypsy-music"; and to some kinds of dance-music. It is also called *tambour de Basque*.

### THE TAMBOURIN

The tambourin is a long, narrow drum, which the performer beats with one stick, holding a flageolet with the other hand. It originated in Provence.

### THE CASTANETS

Castanets are generally used to accent the rhythm of Spanish dance-music, or to give color to music of a Spanish character. They consist of two small hollow pieces of hard wood, usually of chestnut, *castaño* in Spanish, whence their name. They are shaped something like the bowl of a spoon, or a shell, and are held together by a cord, the ends of which pass over the thumb and first finger of the performer. The other three fingers clap the two halves of the castanets together. The sound is a deep, hollow click, which, although not a musical note, is not unpleasing when heard with its appropriate music.

The Spanish dancer holds a pair in each hand. The right hand plays the full rhythm of the dance which is known as the *hembra*, or female part, and the left, a simplified rhythm, on a larger pair of castanets, called the *macho*, or male.

Wagner uses both castanets and tambourine in the delirious revels of the *Tannhäuser Baccanale*.

PERCUSSION INSTRUMENTS
SYMPHONY SOCIETY OF NEW YORK
*Hans Goettich*

Saint-Saëns calls for castanets in his opera of *Samson et Dalila.*

### THE CARILLON OR GLOCKENSPIEL

We sometimes hear what sounds like a chime of bells, or one little silvery bell, pealing forth now and then. We do not hear bells at all. The *glockenspiel,* or *Carillon,* is a series of small bars of steel, or bronze, that are struck by two small hammers. Some orchestras use a mechanical contrivance with a keyboard, which enables the player to produce *arpeggios,* trills and rapid passages that otherwise would be impossible.

A toy imitation of a chime of bells was used by Handel in his oratorio of *Saul* and by Mozart in the *Magic Flute;* but to-day steel bars are preferred. They are called, however, "bells," or *glockenspiel.*

Wagner made an interesting use of them in the Waltz in Act III of *Die Meistersinger* and also in *Siegfried* and in the *Walküre.* In the latter work the *glockenspiel* is magical in helping to produce the impression of fire. When Wotan strikes the ground with his staff and calls Loge, the god of fire, to come and guard Brünnhilde, who is falling into her enchanted sleep under the big pine tree, the red flames flicker and soar into the air. We hear, with the slumber-song and other familiar motives, the dance of the leaping flames. More and more furiously they come, sparkling and gleaming like rubies and fire-opals; and as they rise and crackle and soar heavenward the *glockenspiel* adds its delicate, silvery notes to the Fire-Music, making brilliant tips of light to the soaring plumes of flame. And here, too, the triangle contributes its white notes like vivid points of heat and light.

### THE CELESTA

The celesta is a small, square instrument that looks something like a parlor organ. It has a keyboard like the piano, with black and white keys running to four or five octaves. Moreover, it has dampers and a soft pedal like the piano; and the hammers are set in motion by a simplified piano action.

The music is written like piano music for two hands in the Treble and Bass Clefs; but sounds an octave higher than it is written.

The celesta is a new instrument. Tschaikowsky and Richard Strauss gave it popularity.

The celesta's silvery and resonant voice owes its charm to the fact that under each note, a little bar of steel, a resonator of wood is fastened.

The celesta *never gets out of tune.* It is sweet, clear, fairy-like, fanciful, light and graceful. It is something like the little glass harmonica, which children play with.

### THE XYLOPHONE

The xylophone (coming from two Greek words, wood and sound) is made on the principle of the toy harmonica. It is an old instrument still used by primitive and half-civilized tribes. A series of slabs of wood, graduated in size, are fastened to two "guides," or supports, also of wood. The xylophone is played by two wooden "beaters," which the performer holds in each hand. The way of playing it is much like the Hungarian cimbalon. It has a dry, hollow sound; and is only suited to grotesque music such as Saint-Saëns's *Danse Macabre,* or Dance of Death, in which

it represents the clattering of the bones of the dancing skeletons.

### THE WIND-MACHINE

The wind-machine is very seldom used. Strauss calls for it in the Windmill adventure in the *Don Quixote Variations*. It is a curious *contrivance* rather than a musical instrument. It is a sort of barrel with some of the staves missing and the empty spaces covered with black silk. The barrel is laid on its side in a "bearing," supported by an open "cradle." It is then turned round with a handle, so that the silk comes in contact with a "face" of wood, or cardboard, and makes a rushing noise like the sound of wind, blowing violently.

### THE RATTLE

Occasionally the rattle is used, — the old Watchman's Rattle, a wooden cogwheel, which is revolved against a hard, but flexible, spring of wood, or metal. Strauss employs it in *Till Eulenspiegel*.

### THE ANVILS

A blacksmith's anvil is never brought into the Orchestra when "anvils" are required. The effect is produced by means of steel bars. The player beats them with a hard metal "beater."

The famous Anvil Chorus in *Il Trovatore* is played on such a substitute. Wagner calls for no less than eighteen "anvils" in *Das Rheingold* to give an idea of the prodigious industry of the Nibelungs. They are of three sizes — small, medium and large — and the music for them is written in nine parts to get the effect that Wagner wanted.

### THE CUCKOO

This toy instrument consists of two tiny pipes, made of wood and mounted on a pair of tiny bellows. The pipes are stopped with a plug that is pushed in and pulled out to get the sound of the bird's voice.

The cuckoo is used in Haydn's *Toy Symphony* and in Humperdinck's fairy opera of *Hänsel and Gretel.*

### BELLS

Bells are sometimes wanted by a composer. Meyerbeer used a big bell in low F to give the signal for the massacre of the *Huguenots* and combined it with bassoons and clarinets, which give the music a sinister quality that is very impressive. Rossini has a bell in the second Act of *Guillaume Tell* and Verdi has a prison bell ring in *Il Trovatore.*

"There is nothing more false," says Lavignac, "than the saying 'who hears a bell hears one sound only,' for of all sound-producing agents the bell is perhaps the one which develops the greatest number of overtones, often discordant even, which sometimes causes a difficulty in discovering which is the fundamental musical tone."

Of course, we can easily see how such would be the case, when the sound is reflected back and forth inside the bell and the old echoes do not have a chance to die away before new vibrations are set in motion.

Modern composers rarely use real bells. They give the impression by other means; for instance, for the midnight chime in his *Danse Macabre,* Saint-Saëns

DRUM, XYLOPHONE, AND TRIANGLE
SYMPHONY SOCIETY OF NEW YORK
*Samuel Borodkin*

has twelve notes plucked on the harp. Strauss in his *Sinfonia Domestica* tells us it is seven o'clock by seven little taps on the *glockenspiel* (see page 127). The Bells of Montsalvat in *Parsifal* are usually played on the "Tubular Chimes," a row of steel pipes, which are shown in the illustration facing page 126.

## CHAPTER VIII

# THE ORCHESTRA

*The Orchestra as an instrument; instruments of the Sixteenth Century, — Chitaroni, theorbo, lutes; Claudio Monteverde (1567–1643); Marc Antonio Ingegneri; Orchestra of Orfeo; Chitaroni; Il Combattimento di Tancredi e Clorinda; Incoronazione di Poppea; Adriannà; Vergilio Mazzocchi (1593–1646), and his music school; Stefano Landi; Orchestras in Rome; Orchestras in Venice; Antonio Cesti and his opera, "Il Pomo d' Oro"; Cardinal Mazarin; growing popularity of the violin; the first French Orchestra — the Twenty-four Violins of the King; Bocan's playing; anecdote of Cardinal Richelieu; Louis XIV and his magnificence; Twenty-four Violins of the King; amateur orchestras; instrumental musicians; Jean Baptiste Lully (1632–1687); La Grande Mademoiselle; the "Petits Violons"; Lully and Molière; death of Lully; Lully, the first real conductor; Lully's Orchestra; Descoteaux, the famous flute-player and tulip-fancier; Philbert; quotation from La Bruyère; La Bas, the bassoon-player; Verdier; Jean Baptiste Marchand, the lute-player; Teobaldo di Gatti, the basse de viole; Jean François Lalouette; Pascal Collasse; Marin Marais; La Londe, the violinist; pay-roll of Lully's men; Orchestra of Charles II of England; Thomas Baltzar of Lübeck; music in England in the Seventeenth Century; quotation from Anthony Wood; quotation from Dr. Burney; Corelli; Amati and Stradivari; development of the violin; Giovanni Baptista Bassani; Corelli's great vogue; Geminiani's estimate of Corelli; Corelli's Orchestra and conducting; Corelli's compositions and their influence on violin-playing; Alessandro Scarlatti, "the Father of Classical Music"; Francischello's violoncello-playing; importance of strings in Scarlatti's compositions; Domenico Scarlatti, originator of the Sonata form; Rameau and what he did to develop the Orchestra; the North-German Chorale; Johann Sebastian Bach, the "Musicians' Musician"; Bach's contribution to the Orchestra; Handel and his treatment of instruments; Handel's Orchestra; Handel's conducting; Handel's use of the horn, violoncello, bassoon and kettledrums; neutral tints of the Orchestra of Bach and Handel; Handel's great use of crescendo and dimuendo; Gluck's devotion to Handel; Gluckists and Piccinists; Gluck's contribution to the Orchestra; Gluck's dramatic sense; Gluck's ballet-music; Haydn; Prince Esterhazy; the second and "magnificent Prince Esterhazy"; "Papa Haydn," the "Father of the Orchestra"; Haydn's Orchestra; Haydn's knowledge of the kettledrums; quotation from Stendhal; how Haydn composed; Dr. Burney's estimation of Haydn and his new style of music; a modern critic on Haydn's style; Mozart, the supreme genius; Stendhal on Mozart; Mozart's gift to the Orchestra,— tone-color; influence of Mozart and Haydn upon each other; the Mannheim Orchestra; Mozart's love of the clarinet; Mozart's*

*conducting; Mozart's first composition; Beethoven's admiration for Mozart; an early appreciation of Beethoven (1818); Beethoven's unhappy life; Orchestra of the Elector of Cologne in 1791 in which Beethoven played; Beethoven's improvization; Beethoven in Vienna; the Lichnowskys; a Beethoven concert in 1795; Beethoven at the piano; appearance of Beethoven; Mozart's and Beethoven's Orchestra; Beethoven's Symphonies; Beethoven's treatment of instruments; Beethoven's enrichment of the Orchestra; Beethoven, the last great classic and prophet of the New Era; Classic and Romantic contrasted; the Romantic School; Carl Maria von Weber; Weber as conductor of the Dresden Orchestra; Weber's development of the woodwind; Weber's fondness for the clarinet and horn; Weber, a painter of Nature; Schubert's gifts to the Orchestra; Schubert's Symphonies; Mendelssohn's grace, charm and brightness of spirit; Mendelssohn's happy life and varied accomplishments; Mendelssohn's orchestration; Mendelssohn's conducting; "Music of the Future" and its three great exponents, — Berlioz, Liszt and Wagner; Romantic Movement of 1830; Berlioz, a follower of Beethoven, Weber and Gluck; Berlioz's love for the colossal; Heine on Berlioz; Berlioz's volcanic temperament; Berlioz, the "Father of Modern Orchestration," Berlioz, a forerunner of Wagner; Wagner's confessed indebtedness to Berlioz; monster concerts; Berlioz's symphonies; Paganini's gift to Berlioz; Franz Liszt, a favorite of fortune; Liszt's education; Liszt in Paris; the Romantic Movement; Liszt impressed by Paganini; phenomenal concert-tours; Liszt's generosity; Liszt in Weimar; Liszt becomes an Abbé; Finck on Liszt's genius; Liszt, a follower of Berlioz; the Symphonic Poem; Liszt's orchestration; Franz Liszt, a wonderful spirit; Richard Wagner; Liszt's aid to Wagner; Wagner's dream fulfilled; Wagner's introduction of the Symphonic Orchestra into the opera; Wagner's treatment of instruments; Wagner's orchestration and Wagner's Orchestra; Wagner's novel effects; Richard Strauss; Strauss's life and education; novel use of instruments; complex and gigantic effects; Tschaikowsky; his education and career; Orchestra and scoring of Tschaikowsky; the "Casse Noisette Suite" (Nut-cracker Suite); Tschaikowsky's love for Mozart; French composers and symphonic music; Saint-Saëns; French composers return to national fountains of inspiration; modern French composers; Debussy and his music; Debussy's orchestral effects; Debussy's Orchestra, — a melodious atmosphere and musical web; Debussy's opalescent effects; Debussy's love of water — sea, fountains and silvery rain; L'Après Midi d'un faune; Debussy's Nocturnes; Catholic tastes of Amerian audiences; Symphony Orchestra and Orchestra of the Eleventh Century compared.*

NOW that we have become acquainted with all the instruments in the Orchestra, we must turn our attention to the Orchestra itself.

We must consider the Orchestra as *one great instrument on which the conductor plays.*

The Orchestra is made up of all these varied instruments, which, as we have seen, have been brought to perfection during centuries of use and experiment, — instruments of long ancestry and historical interest, instruments that have figured in song and story and romance.

The Orchestra is, therefore, a very unique instrument itself.

It holds within itself nearly every kind of tone from the deepest rumble of the bass tuba and growl of the double-bass to the cool, flowing notes of the clarinet and bassoon and to the penetrating call of the flute, the cry of the violin and scream of the piccolo. It holds within itself every kind of vibration from bowed, or plucked, strings, and air blown upon quivering reeds, or through pipes, or tubes, or horns; it has every kind of thump on tightly-stretched skin; it has every kind of rattle, clang and clash; and every kind of sharp blow, from the heavy stroke on the steel rod to the silvery notes of bells, or the brilliant, fiery sparks from the triangle.

But there is one thing more that we have not yet taken into consideration, — and that is the *human* element.

What would these instruments be if there were no musicians to play them?

Is there anything more melancholy than a case full of musical instruments hanging lifeless and silent in a museum?

We recall the striking illustration Shakespeare makes of unused instruments in his *Richard the Second*, where the Duke of Norfolk, being banished, breaks forth with:

*"A heavy sentence, my most sovereign liege,*
*And all unlook'd for from your highness' mouth.*
*The language I have learn'd these forty years,*
*My native English, now I must forego:*
*And now my tongue's use is to me no more*
*Than an unstringed viol, or a harp;*
*Or like a cunning instrument cased up,*
*Or, being open, put into his hands*
*That knows no touch to tune the harmony."*

In addition to the rich and varied instrumental material, we have *ninety* personalities possessed of brains, emotions and artistic ideals and aspirations.

We call the Orchestra an instrument, or even a machine; but let us think for a moment of these intelligent personalities behind their instruments, or merged into their instruments, and we shall realize what a *sensitive* organization a Symphony Orchestra is.

The Orchestra is a corporate body that is ruled by the Conductor. His is the power that holds all these forces together; he it is who guides these ninety men through the mazes of the vast musical composition, or fabric of woven melodies and harmonies, the patterns and colors of which he will place before our auditory nerves, which will carry to and impress upon our brains the musical forms and figures that also charm our senses; and to do this the Conductor must understand the technique of his Orchestra every bit as thoroughly as each man knows the technique of his instrument.

The Orchestra began to be an instrument just about the time that Gasparo di Salò (see page 21) fixed the form of the violin.

Let us look for a moment at the instruments that were in use at the beginning of the Sixteenth Century — the instruments that formed an Orchestra in Shakespeare's time — the Orchestra of the Rennaissance. Whether in Italy, France, or England, it was the same.

"We are in a small square chamber, panelled and floored with oak. It has a table with two silver candlesticks, a couple of chairs and a few dozen books arranged on a sort of dresser. In the window is a settle, and on it a jumbled heap of music. We turn it over and see that it is almost all manuscript — single-line parts of madrigals, ballets and canzonets. But there are one or two printed books, such as Mr. Anthony Munday's *Banquet of Dainty Conceits*, published in 1588, and some later things, such as Mr. Peter Philips's Madrigals that came out four years ago. Here is even a proof-copy of Mr. Morley's new five-part *Ballets*. Clearly the owner of this room is an advanced thinker. That locked case opposite, of stamped Spanish leather, evidently contains his favorite *gamba*.[1]

"However, we must not loiter any longer in this room. We had better make our way into the corridor, go down the staircase, and walk through the great gallery that runs the whole length of the building. We are now in the East Wing, where apparently the musicians have their quarters. In the main room the logs are blazing; and on the table are scraps of lute-tablature altered and re-altered, with odds and ends of minnikins — the thin top-strings of the lute. There has evidently been a rehearsal here.

[1] See page 55.

THEORBO MADE IN PADUA IN 1629

"Near the fireplace are the lutenists' boxes. We notice on them French and Italian, as well as English, names. If we open any of the boxes we shall find inside them some very lovely instruments. Their vaulted bodies are built up of strips of pine and cedar, and there are exquisite purflings and ornaments of ebony, ivory and silver. In front is at least one beautifully carved and inlaid 'rose'; while the necks are all 'fretted,' semitone by semitone. Each lute has twelve strings of catgut tuned in six unison-pairs. But if we touch two or three lutes in succession, we shall see that all players do not adopt the same tuning. The average lutenist seems to prefer for his six pairs of strings a system of fourths joined by a third in the middle.

"The instruments are made in three chief sizes, but the *tenor-lute*, or *theorbo*, from Padua,[1] appears to be a favorite. If we take up one of these lutes and pass our hands across its strings, we shall become aware of a deliciously tender harmony. The instrument has no strength -- only a sort of *melancholy quietude*. And this is due, in some measure, to the length of the strings. For much tension is out of the question in an instrument whose bridge is merely glued to the belly.

"Here is a tall lute case in the corner, reaching almost to the ceiling. From its appearance it has travelled far, over rough roads. Its owner's name suggests Italy. Let us take it out very gingerly. It is the latest thing in lutes — a big Roman *Chitarone*,[2] or archlute, or bass-lute, with seventeen strings —

[1] See illustration facing page 136. [2] See illustration facing page 140.

practically two instruments in one. For besides the usual *pairs-of-strings* that run up to the lower 'nut,' there is a second series of *single-strings* stretched to a second nut at the lute head. These are the newly invented *diapasons*, a set of bass-strings which hang free of the finger-board and can therefore only be plucked to give the one note of their full vibrating length. This addition is naturally a great advantage in *consort*, or ensemble, playing; for it extends the compass diatonically downwards.

"Before we leave the rehearsal room for Lord Strange's performance in the Hall we shall make free to open the huge oak cupboard that runs across the upper part of the room. This is a boarded chest, as they call it; and we know very well that we shall find inside a set of six viols. They are heavy and cumbersome instruments and they run downwards like a Noah's Ark procession from No. 1, the big Double-Bass, to No. 6, the High Treble. The favorite is No. 2, the Bass Viol, or *Gamba*. That is *viola da gamba* (leg-viol). The Italians also used the names *da spalla* (the shoulder) and *da braccio* (arm) for the next two smaller viols. It is doubtless a choice specimen of this instrument which was under lock and key in the other room. It may have been made by Gasparo di Salò.[1] For the Italians are rapidly coming to the fore as viol-makers; and a new man, Andreas Amati,[2] is manufacturing a very small instrument, which he calls a *violino*, or *violin*. But the Queen's violists probably regard this as a rather cheap and not quite worthy attempt.

[1] See page 21. [2] See page 25.

"The tone of the viols is sombre and somewhat nasal. It lacks brightness altogether. Excellent for *arpeggios* and quiet vocal passages, the instruments are apt to sulk unless continually coaxed by the bow. And the bow unfortumately has to be used with considerable caution. For the true viols have no fewer than six strings apiece. And in their tuning they follow the irregularities of the lutes by using a series of fourths joined together by a third. But the makers are beginning to see the necessity of reducing the number throughout the whole Viol Family; for the difficulties of bowing are very great. Accordingly they are just introducing a modified type of instrument with five strings. They call these *quintons;* and those players who use them are adopting a tuning which gives them perfect fifths, at any rate, in the lower part of their compass. This is interesting. For it shows that some change is in the air. We should like to have ten minutes' private conversation on the subject with Signor Amati. If we did, he would first warn us that what he was about to say must not on any account be repeated to his best customers, the violists. Then he would probably give it as his opinion that his new *violino* with its simple regular tuning in fifths and its lovely caressing tone-quality is worth all the viols that have ever been made; and that all the talk about 'vulgarizing' and 'popularizing' is nothing more than professional stupidity."[1]

Orchestral music begins in Italy. It also begins with the dawn of the Opera. We must first remember

[1] Cecil Forsyth.

that the Italians always cared more for solo-singing than for chorus-singing. It was just the same with their instrumental music. Instruments playing *solo*, or holding a dialogue together, with brilliant improvisations, occupied a much higher place in the Italian taste than harmonies produced by a number of instruments playing together. In other words, the Italians preferred *monodic* music to *polyphonic* music. So we find in the first operas, or plays interspersed with music, that the only instruments that were welcomed were the clavecin, the organ, the *chitarone*, and the lyre.

Now that combination is not as thin, nor as simple, as we might think. The clavecin and organ could supply both bass and treble. The *chitarone*, as we have just seen on page 137, was a big bass-lute known also as the archlute, with two sets of strings: one reaching all the way down the enormously long neck; the other, and shorter, reaching only about a third the way down. Each set of strings had separate pegs.

The lyre was very complicated. It was a kind of viol with twelve, or fourteen, strings, tuned either in fourths or fifths, alternately ascending and descending. This very singular way of tuning permitted the performer to find all kinds of chords in all kinds of positions beneath his fingers.

The composer carried his melodies, however, on a very simple bass. If the opera had "symphonies," that is to say instrumental interludes, and ballet-music, the composer would often indicate in his score "at this place the instruments can play"; and the

THREE CHITARONI

*Seventeenth Century*

musicians selected what they pleased. As time wore on, if the composer indicated a place for one or two violins to play, he would give them a little theme; and the players worked it up and elaborated it to suit their fancy and according to their skill. Very often, indeed, they added a brilliant musical *divertissement*. The scores of the earliest Italian operas have very little accompaniment save two or three violins above a bass played on the theorbo, or clavecin.

At the beginning of the Seventeenth Century a change took place in music. A great many of the old kinds of wind instruments and the grave old viols began to disappear. They were too old-fashioned for the New Art of the time. The famous opera of *Orfeo* by Monteverde (1607) is, perhaps, the last of the great operas of that period that contained all that was considered in those days the *rich voices of the Orchestra*. *Orfeo* is a landmark in musical history for many reasons. We shall presently see that it is also the *starting-point of our modern Orchestra*.

And who was this Monteverde to whom we look back through three hundred years of musical history? One of the most interesting facts about him is that he was born in Cremona, that famous "violin town," [1] where music was literally in the air, although the Amatis and Stradivaris were not yet working.

Claudio Monteverde was born in 1567. He was a contemporary of Gasparo di Salò and Maggini.[2] At an early age he was an expert violist and was taken into the service of the Duke of Mantua. The Duke's

[1] See page 24.

[2] See page 23.

Court was the centre of every luxury and elegance in Lombardy and music had long been one of the arts beloved there.[1] The Mantuan collection of instruments was famous; and the Duke, like all other noble princes of the time, had his own band of private musicians. At their head for his *Maestro di Capella*, he had a very learned musician named Marc Antonio Ingegneri; and young Monteverde was put under him at once to finish and perfect his musical education.

Ingegneri, however, was unusually fond of counterpoint and of writing fugues and Monteverde cared very little about *polyphonic* music. And we can imagine, therefore, that when at the age of sixteen he burst forth with a beautiful *Book of Madrigals* — madrigals were all the rage in those days — his artistic nature sought relief from studies that he thought horribly dry and tiresome, but which undoubtedly did him a lot of good. This set of madrigals was so well received that he followed it with four more books of this lovely, lyrical form. Then in 1603 Ingegneri died and Monteverde was chosen to succeed him. He had been superintending the music at the Court of Mantua for four years and providing brilliant entertainments and concerts of all kinds when the Duke's son, Francesco di Gonzaga, married Margharita, Infanta of Savoy. It was a brilliant alliance; and the Duke of Mantua, wishing to celebrate it in royal style, charged Monteverde to write the most splendid opera possible and to stage it in the most magnificent manner. So Monteverde composed *Orfeo*. This was one of the most popular of all subjects. It seems as

[1] See page 21.

if every Italian composer had to write the search of Orpheus for his beloved Eurydice. Ever since Dante had drawn his fantastic scenes of the *Inferno*, Italian audiences had thrilled to stage pictures of the lower regions for three hundred years! But it was strange that Monteverde should have picked out this subject; for while he was writing his opera his own lovely wife died and he was in bitter grief for her. So, perhaps, one reason that Monteverde's *Orfeo* is so vital a work lies in the fact that the composer was singing of his own despair.

We often see in histories of music that Monteverde astonished the musical world with a novel Orchestra in *Orfeo* and that he introduced a great many new instruments into his score.

Nothing of the kind! What Monteverde called for in his Orchestra of *Orfeo* was *exactly what the Court of Mantua had been accustomed to see and to hear. There was not a single new instrument of any kind whatsoever!*

Now this is what he had: an Orchestra of forty instruments. As instruments of the piano class he had two *clavicembali*, two *organi di legno* (little organs with flute tones) and a *regale* (little organ). As instruments of sustaining bass — *bass continuo* — he had two double-bass viols, three *violas da gamba* and two *chitaroni* (deep lutes). As instruments for string ensemble he had two little violins *à la française*, or *pochettes*, ten *violas da braccio* (soprano, alto, tenor and bass), and ordinary violins (such as Gasparo di Salò and Maggini were making). As wind instruments he had a *clarino* (shrill trumpet) (see page 110); three *trompettes* with *sordini;* four trumpets and two

*cornets à bouquin;* flutes, both shrill and deep; and two oboes. He also had an *arpa doppia* (double harp).

First of all, as was usual in those days, the trumpets gave a fanfare, or "flourish," to announce the beginning of the drama. Then came the introduction. Though called a "Toccata," it was very nearly a *real overture.* It had to be repeated three times before the rising of the curtain. The organ, clavecin and *chitaroni* seem always to have accompanied the singers; the *ritournellas,* which marked the entrance of the singers, were usually played by two solo instruments — the little tiny "French violins," or the little flutes, on a continued bass from some of the bass instruments; and in the "symphonies" two groups of instruments were used — first, a group of violins in five parts, *viole di brazzo* (ten in number) supported by the bass of double-bass viols, clavecins, or *chitaroni.* Then a group of seven instruments (five trombones and two cornets). The "symphonies" were very short — just an air played through once; but they are very sweetly harmonized and resemble dance-tunes.

The groups of instruments were intended to express, accompany and even symbolize each personage in the drama. *Orfeo* was, therefore, not an innovation; it was the highest expression of the *end of a period — the crowning-point of the music of the Italian Renaissance.*

There were several new ideas in *Orfeo,* however, even if the instruments of the Orchestra were just those of the Italian Renaissance. In one place, for instance, two violins were allowed to play independently of the viols; and *that* was absolutely novel.

CLAUDIO MONTEVERDE

The fact is *Monteverde was new*, if his Orchestra was not; and his originality was going to express itself more fully in after years as we shall presently see.

Let us run through the arrangement of Act III. The curtain rises on the Infernal Regions with scenery painted in the magnificent style of the Italian painters of the period — Titian, Tintoret, Correggio — any of the great masters we may like to think of — and with many ingenious mechanical devices; for these brilliant Italians were very well accustomed to getting up pageants and *festas*. The trombone, cornet and organ play large and sombre chords to evoke the idea of Hades. Orpheus enters and tries to conquer the Powers of Darkness with all the resources of his art. The first couplet of his song is accompanied by the *organo di legno* (organ with the flute tones) and the *chitaroni;* and when Orpheus begins to sing, the two violins play. At the second couplet, after a *ritournella* by the violins, two cornets take their places and play; and at the third couplet, when Orpheus sings "Where Eurydice is, is paradise for me," the double harp plays graceful arpeggios. Then Orpheus sings some very elaborate vocalizations accompanied by two violins and a *basso da braccio* (a deep violin). When Orpheus bids Charon, the ferryman, let him pass over the river Styx, the string-quartet plays chords; and, finally, when Orpheus is triumphant, the whole Orchestra bursts forth in one grand *finale*.

*Orfeo* was a truly wonderful work. It was startling in many ways; but its *Orchestra was conservative*. The instruments played together in families. There

was no attempt to mingle all their voices together, nor to combine instruments except at the very end when the curtain was falling.

It is not *Orfeo*, therefore, that marks the beginning of our modern Orchestra, but an opera that Monteverde brought out twenty years later called *Il Combattimento di Tancrede e Clorinda.*

In the *Combat of Tancred and Clorinda*, to give the opera its English name, Monteverde used a very different Orchestra from the one he had used in *Orfeo.* Here he has two violins, two viols (tenor and bass) and the *contrabasso da gamba.* At this very moment — the year 1627 — *the violin took root in the Orchestra.* In ten years' time it became the leading instrument.[1] By 1639 *there were no more players on the viol in Italy* that amounted to anything. From 1634 the violoncello was also established as an orchestral instrument.

Truly, a great change had taken place! Monteverde's Orchestra — we can now call it so — had become one in which the violins and the instruments of the piano class — the clavecin, etc. — form the *new body of the Orchestra.*

When Monteverde wanted certain effects, he now used special *timbres*, or kinds of voices: trumpets and drums for triumphal scenes; cornets and trombones for fantastic scenes; and flutes for pastoral scenes. Such was the Orchestra that Monteverde used in his celebrated opera, the *Incoronazione di Poppea*, which he brought out in 1642, at the end of his life, and which the *Orchestras of Venice followed for years.*

[1] See pages 49 and 58.

Another thing that Monteverde did that was new in the *Coronation of Poppea* was to make his violins describe the excitement of the combat by a long *tremolo*, using the passage exactly as we do to-day. It was so novel that the violinists refused to play it. But they had to!

Monteverde also did not hesitate to introduce an instrumental *intermezzo* in the midst of a tragic scene.

Monteverde was a painter of life. His music was vital and vivid and in spirit much like that of the great Italian portrait-painters who were his contemporaries. He saw his characters and he explained them in musical language; and *he made his Orchestra help him to do so.* And he did this, moreover, in such an artistic way that Wagner thought him worthy of copying nearly three hundred years later.

Monteverde stands forever as one of the greatest figures in musical history.

After the representation of *Orfeo*, Monteverde continued to compose; and in 1608 he brought out an opera called *Adrianna*, which aroused the whole of Italy to enthusiasm. Then he produced a number of ballets and comedies. In 1612 he went to Venice, for he had been appointed *maestro di capella* in the beautiful church of St. Mark's. The people went wild over him. He was honored in every way; and his music travelled into Germany, Holland, France, and England and was studied by all the leading musicians.

After the terrible epidemic of the Plague in 1630, which carried off fifty thousand persons in sixteen months in Italy alone, Monteverde entered the Church;

but this did not prevent him from composing dramatic works and madrigals (which he still loved to write) on love and war. He saw the first public opera-house opened in Venice in 1637, which was an important musical event, and he died in 1643, at the age of seventy-six.

After *Orfeo*, Monteverde gave up his "noisy Orchestra," as it was considered. He now simplified it. He weeded out the old instruments whose tones did not harmonize with the new instruments — for the Brescian and Cremonese-makers were very busy in these days turning out new models; and, as he lived in the region of the great violin-makers, Monteverde saw every new model as it left the hands of Maggini or Amati.[1] The idea had dawned upon him of *mixing his instruments* — our modern Orchestra was beginning!

We must not imagine, however, that Monteverde was the only great musician of the day, though he was *the most popular composer in Europe.*

Florence, Venice and Rome, to say nothing of all the smaller cities, had their operas, ballets and musical-contests. Rome was very active. And, moreover, there was a great musical educator in Rome, whose name was Vergilio Mazzocchi (1593–1646), who was one of Monteverde's contemporaries. He was *maestro di capella* in St. John Lateran's and in St. Peter's. It will give us an idea of how seriously music was studied in those days if we remember what Mazzocchi required and what extraordinarily proficient pupils he sent out from his school. They could

[1] See pages 49 and 58.

CAR OF MUSICIANS. TRIUMPH OF MAXIMILIAN

*By Albrecht Dürer, about* 1518

sing, play instruments, compose and write musical dramas and ballets; they could read music at sight and copy it; and they were also well trained in literature. Few of us would care for a day like this: —

In the morning — "an hour to singing difficult exercises; an hour to the study of literature; an hour to practise singing before a mirror so as not to make disgraceful faces. In the evening — half an hour to theory; half an hour to the study of counterpoint; an hour to composition; and an hour to literature." The rest of the day was devoted to practice on the clavecin, to composing for pleasure, and taking a walk in the open air. Pupils were also sent to the theatre and concerts, so that they could hear and study celebrated singers and performers; and they had to write an account of their impressions! Poor young things! A busy schedule for work and *pleasure!*

About this time an opera by Stefano Landi was produced in Rome (1632). It was called *S. Alessio;* and the libretto was written by Giulio Rospigliosi, from the *Golden Legend.* This work is very important in musical history, not only because it has a double chorus and a double Orchestra, but because the second act opens with a real overture in three movements. It begins with a rapid *Fugato* in 4-time; then comes a majestic *Adagio* in 3-time; and then another rapid *Fugato* in 4-time. The "*sinfonia,*" or "symphony," introducing Act I, is in five movements, — a theme treated in fugue and counterpoint; a little piece described as an "echo"; a short, slow number in 3-time; and a rapid *Fugato.* The orchestral score is written in *five* instrumental parts: (1) – (3) violins;

(4) harps, lutes, theorbos, violoncello and bass viol; and (5), *clavicembali.*

Music in Rome was kept almost exculsively for the wealthy and aristocratic circles. At the Barberini Theatre, which could easily seat 3,500 persons, only guests were admitted who had invitations. The public was not allowed to see one of these fine operas! Woe betide anyone who tried to get admittance! On one occasion in 1639 the Cardinal Antonio Barberini chased out of the opera-house with his stick a nice-looking and well-dressed young man, because he had not sufficient rank to come there!

In Venice matters were different. The public was not only allowed to attend, but the director of the opera-house would even permit gondoliers to sit in the boxes when the owners were absent. Consequently, the Venetians were very well educated in artistic music. Many beautiful works were given there. And the Venetian Orchestras were of the very best.

Mr. Goldschmidt, who examined the scores of 112 of these old operas in the Library of St. Mark's, found that the main support of the Orchestra was the clavecin, which usually accompanied the singers; that the violins were in general charge of the *ritournelles* and the *entr'actes;* that the trumpets played in the overtures and marches and often with the voices; that the cornets, trombones and bassoons were used for fantastic effects; that horns, drums, and other instruments of percussion were used; and that flutes were not as popular as they were in France.

Can we not see in these old Venetian Orchestras

CAR OF MUSICIANS. TRIUMPH OF MAXIMILIAN

*By Albrecht Dürer, about* 1518

of three hundred years ago some ideas gradually approaching towards our own?

Let us turn to Vienna, which was the great centre of the Central Empire. One work will suffice to show that there was splendid music in that brilliant capital. In 1666 Antonio Cesti, one of the members of the Papal Choir in Rome and then *maestro di capella* for the Emperor Ferdinand III, in Vienna, wrote for the Emperor's wedding festivities an opera called *Il Pomo d'oro*. It was described as a "dramatic festa." The theatre seated 5000 persons. The Orchestra was separated from the last row of chairs by a wide space and the conductor, who was the composer of the work, sat at the *cembalo*, with his thirty musicians around him. His Orchestra consisted of six violins; twelve alto violas; tenor; bass; contrabass; two flutes; trumpets; two cornets; three trombones; a bassoon; and a little organ.

The strings seem to have played most of the accompaniments to the voices; the flutes were used for the pastoral scenes; the trumpets for the great choral scenes; and the cornets and trombones for the infernal regions, — of course, they had to have infernal regions!

An overture preceded each act. The opera was a magnificent spectacle. By turns heaven and hell were represented; there were tempests on the sea; there were battles on the land; towns were besieged with armed elephants; and there were gardens and lovely landscapes and superb costumes. And the Orchestra had to be worthy to accompany all this stupendous stage-setting.

An idea of the Orchestras of the Renaissance may be had by looking at the three pictures facing pages 148, 150 and 152, representing the *Triumph of Maximilian* by Albrecht Dürer.

The Emperor Maximilian, who stood at the head of the old Roman Empire and the German nation, took a childish delight in the glorification of his own person. Instead of having a Triumphal Arch in marble erected, he engaged Dürer in 1512 to make a record of his fame in engravings. There was to be a Triumphal Arch and a Triumphal Procession followed by a Triumphal Car in which the Emperor and his whole family were to appear. Maximilian died in 1518. Dürer, to honor his memory, brought out the *Triumphal Procession* in eight large plates, three of which are represented in this book. They show exactly the kinds of instruments that were used in the Orchestras in Rome, Florence, Venice and Vienna, of which we have been talking; but they give the Spirit of the Renaissance as interpreted by the German mind.

Cardinal Mazarin, who brought so many Italian tastes into France when he became Prime Minister to the Queen Mother, Anne of Austria, also introduced the Italian Opera. In 1643 he sent to Rome for musicians.

It is very interesting to note the growing taste in France for "Strings." Like Italy, France had lost all pleasure in the big, bass woodwind instruments; and as for brass instruments, they were not tolerated. All had gone. Germany and Spain kept wind instruments in their Orchestras; but in France and

CAR OF MUSICIANS. TRIUMPH OF MAXIMILIAN

*By Albrecht Dürer, about 1518*

Italy the bowed strings were growing in favor every day. Sometimes in church the cornet was played to mingle with the voices, but nowhere else.

The only instruments that French ears cared to listen to were Strings (including the whole Violin Family), oboes and flutes. France always loved the flute, which was comparatively little cared for in Italy, where it was chiefly used in operas, as we have observed, for pastoral scenes.

The violin was becoming more and more popular every day. In every kind of music it took the lead. It had been so much used for dance-music that it had developed into a supple and graceful instrument and one that gave itself most willingly to many delicate shades of expression in the hands of a good player. The violin was often combined with the clavecin and theorbo.

The combination was delicate and charming, rich and beautiful.

The old author of the *Comparison of Italian with French Music* says: "I beg to remark that with its four or five strings, the violin makes you feel certain passions in the most striking manner, for it expresses them in a way peculiar to itself. It really does not matter if it has four strings, or five strings. The Italians tune their five strings in fourths, we tune our four strings in fifths; and it comes to the same thing. The violin mounted in either way is always the perfection of music." [1]

About this time the first *real* French Orchestra came into existence. We may almost consider it

[1] La Vieuville de Freneuse.

as an ancestor of our own, as we shall presently see. This was the famous "Twenty-Four Violins of the King." Although it originated in the days of Louis XIII, it is more identified with the reign of his successor, Louis XIV.

The "Twenty-Four Violins" were the best performers of the period and they are constantly spoken of in the *Memoirs* and *Journals* of the day. One of them, for instance, Jacques Cordier, called Bocan, was dancing-master at the Court of France, as well as violinist, and followed Henrietta Maria, the King's daughter, to England when she married Charles I. When the Revolution broke out and Charles was beheaded, Bocan returned to France and to the King's household. He was one of the best violinists of his day.

"The sound of his violin is ravishing," writes Mersenne (who wrote a book about the instruments of his time); "he plays perfectly, just as sweetly as he wishes; and he makes use of a kind of trembling sound, which charms our spirits."

This was evidently the *vibrato*, which is produced by oscillating the finger rapidly upon a note without allowing it to leave the string; and it does produce "a kind of trembling sound." The old writer described it exactly.

Bocan played on that memorable evening when the Cardinal de Richelieu danced a Sarabande for the Queen Mother, Anne of Austria. At this moment the great Prime Minister of France was taking part in all the momentous affairs of Europe; and we get a glimpse of him in a play hour that few of his

contemporaries had. The Comte de Brienne wrote of it in his Memoirs:

"Richelieu," he says, "was dressed in trousers of green velvet. On his garters were silver bells and he had castanets in his hands. He danced a Sarabande, which Bocan played. The violinist and a few spectators were hidden behind a screen where we could see the antics of the dancer. We nearly split our sides laughing; and I declare that now, even after fifty years, I nearly die laughing when I think of it."

When Louis XIV ascended the throne the "Twenty-Four Violins" became the finest and most celebrated Orchestra in Europe. Though founded, as we have said, in the former reign, the "Twenty-Four Violins" is particularly the *Orchestra of Louis XIV*, the magnificent "Sun-King." In the superb palaces of Versailles and Marly Louis XIV blazed with all the glory that is possible to mortals. Magnificent furniture, magnificent paintings, magnificent gardens, magnificent fountains, magnificent costumes, magnificent ladies, magnificent gentlemen, magnificent feasts and magnificent operas, plays and concerts!

Everything "the Grand Monarch" had was the very best that could be found; for in his reign France was the leading Power in Europe. So, of course, he had the finest Orchestra.

The "Twenty-Four Violins" surpassed everything of the kind that had been known up to that time. They represented the greatest heights to which brilliancy and sonority could attain.

The "Twenty-Four Violins" played in the Court entertainments; they played in the churches; they

played in the gardens; they played on the lawns; and they played for the King and his Court to dance. They also frequently took part in the Court Ballets, when they were dressed in peculiar costumes with masques worn hind part before, so that they gave the ludicrous appearance of playing behind their backs. They played in the gilded and tapestry-hung galleries and Salons of Versailles and Marly and at the banquets of the King. And whenever they appeared they excited the greatest admiration.

Although they were called the Twenty-Four Violins, the whole violin family was represented. There were violins, altos, tenors, basses and double-bass viols; and they played in four-part, or five-part harmony.

"All these parts sounding together," wrote Mersenne, "make a symphony so precise and agreeable that whoever hears the 'Twenty-Four Violins' of the King play all kinds of airs and dances, confesses willingly that he never heard such suave and delicious harmonies before."

Mersenne also remarked that the deeper instruments, particularly the basses, were much more sonorous and stronger in tone than the violins.

We know of some of their names. There was Constantin; there was Lazarin; there was Bocan;[1] there was Foucard; and there was Léger.

"What could be more elegant than Constantin's playing?" cries Mersenne. "What could be warmer and more fiery than Bocan's style? What could be more ingenious and delicate than the diminutions of Lazarin and Foucard? And if you add Léger's bass

[1] See page 154.

CHAMBER MUSIC IN 1635

*By Abraham Bosse*

above Constantin's part, you will hear the most perfect harmony."

Perhaps, if we could hear the gentlemen represented on page 160 draw his bow, we should think his tone very thin and we might not be at all enthusiastic over the style of his playing; but we must remember our ears hear very differently from those that listened to Bocan and Constantin and have been educated along other lines. But certainly the contemporaries of the "Twenty-Four Violins" considered that they were supreme artists. And literature is full of allusions to them.

We also know that Guillaume Dumanoir was first a member and than conductor of the "Twenty-Four Violins."

Sometimes the King sent his "Twenty-Four Violins" to play for his great princes and favorite courtiers. We learn from a contemporary poem that at a superb dinner given by Cardinal Mazarin in 1660, "the feast was fine, joy universal and the 'Twenty-Four Violins' played while we ate melons, *pâtés*, tarts, *biscuit* and dishes of delicious fruit piled up like obelisks. We enjoyed ourselves immensely while they played a thousand beautiful airs."

There was hardly a great gentleman who did not have his little band of violins, or his string-quartet, to entertain his friends and to amuse himself. Those who could not afford to support an Orchestra, or a quartet, would hire one on occasions.

There were many associations of musicians in the big cities like Paris and London (survivals of the old minstrel guilds) and in small towns throughout Europe

where there were violinists, clavecinists, organists, flute-players and a few players of old instruments — like the lute — so fast becoming obsolete — ready to accept engagements. Such men carried the growing taste for instrumental music, and the latest compositions as well, to remote towns and country-houses. They were really preparing the ground for us to-day, though they did not know it.

At this period Jean-Baptiste Lully comes on the centre of the stage.

When we think of the magnificent reign of Louis XIV — he of the long, curling wig, the hooked nose, the supercilious smile, the long robes and the high-heeled and diamond-buckled pumps — we think of the men who made his century so great. We think of the great artists, Lepautre and Bérain; we think of the architect, Mansart; we think of the great furniture-maker, Boulle; we think of the landscape-gardener, Lenôtre; we think of the great ministers, Condé and Colbert; we think of the great generals, Turenne and Fontenoy; we think of the story-writers, Perrault and La Fontaine; we think of the essayists, La Bruyère and Bossuet; we think of the dramatists, Racine and Molière; and we think of the musician, Jean-Baptiste Lully.

Jean-Baptiste Lully was not a Frenchman. His name was Lulli and he was born in Florence in 1632. He was of humble origin and was taught by an old Franciscan monk to play the guitar and to sing. Lulli was unusually clever. He attracted the attention of the Chevalier de Guise, who was visiting Italy; and this gentleman was so fascinated with him

that he took him to France and handed him on to Mademoiselle de Montpensier, the daughter of Gaston d'Orléans, that eccentric person who is known in history as "*La Grande Mademoiselle.*"

*La Grande Mademoiselle,* like every other person of place and wealth, had her own Orchestra; and Lully (as his name was now written) was given a place in it as one of the violins, while the Comte de Nogent, who became interested in him, saw that he had lessons. *La Grande Mademoiselle* gave very brilliant ballets and concerts at the Tuileries; but when the Royal Army occupied Paris, she was banished to her old *Château de Saint-Fargeau,* which was quite far in the country. Lully went with the rest of the household; and when he was not playing in the Orchestra, or dancing in the ballet, he was employed as page. Some say, indeed, he even served in the kitchen.

Lully, full of tricks and mischief and fun, composed a satirical song on his mistress, *La Grande Mademoiselle,* who was a tempting subject for a young boy's wit. But *La Grande Mademoiselle* heard the song; and she very naturally dismissed him from her household. But this disgrace did not affect Lully. In fact, it helped him in his career; for he very soon got a place in the Twenty-Four Violins, — and there he was in the King's private band! And *La Grande Mademoiselle* had to see and hear him play very frequently.

*La Grande Mademoiselle* does not refer to Lully's insolence in her *Memoirs.* Her version is as follows: "He did not want to stay in the country and asked for his dismissal. I gave it to him and he has since made his fortune, for he was a very great dancer."

Lully was as clever as he was musically gifted. It was not long before he had charge of all the "King's Music," which consisted of the Chamber Music, the Chapel Music and the *Grande Écurie* (the Stable). The latter comprised the music for hunting and processions and out-of-door *fêtes*. The famous "Twenty-Four Violins" played at dinner, at the Court balls, and gave concerts for the Court, as we have seen.

In 1655 the King created a new Orchestra especially for Lully called the "*Petits Violons.*" At first it consisted of sixteen players, but soon it was increased to twenty-one. This Orchestra played at the Court balls, at the morning toilet (or *lever*) of the King, at the dinner (or *grand couvert*) and on various other occasions. Some persons thought it played even better than the "Twenty-Four." Lully composed a great number of dances for it — sarabandes, gigues, chaconnes, etc., which delighted the King and his Court. Sometimes the two Orchestras played together under Lully's guiding hand.

Jean-Baptiste Lully now became the most important musician in Europe. After a time he felt that the violin, which he played so well, was beneath his dignity, so he gave it up and devoted himself to the harpsichord. He staged and danced in ballets for the Court; wrote operas to the poetic *libretti* of Quinault and produced them with superb scenery; and he *composed all the musical interludes for all of Molière's plays!*

He also played in several of Molière's comedies. He took the part of the physician in *Pourceaugnac* and he played the comical Muphti in *Le Bourgeois Gentilhomme.*

ONE OF THE TWENTY-FOUR VIOLINS OF THE KING, 1688

Lully ruled like a king.

Lully *was* the King of Music, not only in France, but in all of Europe in those grand days when France stood at the head of all nations in wealth and power under her "Sun-King."

One day in 1687, while conducting a *Te Deum* in honor of the King's recovery from an illness, Lully, "the better to demonstrate his zeal," the contemporary account relates, "he himself *beat the time with the cane he used for this purpose*, and he struck himself in the heat of action a blow upon the end of his foot. This caused a small blister."[1] The quack doctor who was summoned was incompetent and Lully died from blood-poisoning. He left four houses in Paris and a large fortune.

His portraits, which represent him in the big flowing curls of the day — much like the King's own wig — and with large heavy features, are said by contemporaries to flatter him.

Lully was an undoubted genius and he was always clever. We sometimes wonder if he did not know what he was doing when he wrote his satirical song on "Big Mademoiselle," who had plenty of enemies ready to laugh at her expense.

Lully always knew how to attract attention to himself and he never seems to have made a mistake.

I think we may call him the first *real conductor of an Orchestra.* Certain it is that Lully was the first to gather together a virtuoso Orchestra and train it by methods that approach those of to-day.

Lully's Orchestra is, therefore, of the greatest

[1] This is interesting as showing that Lully used a cane to beat time.

interest to us. So let us stop and examine it: "Lully got together the best Orchestra of his time in Europe. It is perhaps an exaggeration to say that he was the first man to train an Orchestra in France and that before him (accordingly to Perrault) musicians did not know how to play from score and had to learn their parts by heart. But he certainly did improve instrumental execution, especially with regard to the violin, and he created traditions in the conducting of Orchestras, which rapidly became classic and were followed in France and even served as a model in Europe. Among the many foreigners who came to Paris to study was an Alsatian, named Georges Muffat, who especially admired the perfect discipline and strict time of Lully's Orchestra. He said that Lully's method was characterized by trueness of tone, by smoothness and evenness of execution, by clean attack and by the way the bows of the whole Orchestra bit into the first chord, that famous 'first stroke of the bow,' as well as by the irresistible 'go,' the well-defined rhythm and the delightful combination of vigor and flexibility, of grace and vivacity. But of all these qualities, the best was the *rhythm*." [1]

Robert Eitner called it an "incisive and expressive rhythm." Others tell us that Lully thought quite as much of delicacy of expression; for there are many marks on his scores, such as "Play softly — almost without touching the notes" and "Do not take off the *sordini* until you are told to."

Lully's Orchestra showed off splendidly in his operas.

[1] Romain Rolland.

"The Orchestra had for its chief instruments: violins in five parts, which played the *ritournelles*, doubled the choruses and beautified the solos with their harmonies. In excited airs expressing quick passion, the voice was accompanied by two violins which played a very elaborate part and when the passion abated returned to their ordinary recitative. Flutes, usually straight flutes and *flutes à bec*, though sometimes 'transverse,' or 'German,' were much used by Lully. Sometimes they played in unison with other instruments. Sometimes they formed separate 'concerts' and sometimes they were combined with the trumpets and violins. The trumpets had a magnificent *rôle*. They played alone in three, or five, parts with the drums. Lully also employed oboes, bassoons, and instruments of percussion, and in his ballets he made a great use of the *tambour de basque*, (tambourine), castanets and drums. He also introduced bag-pipes, guitars and hunting-horns (in *La Princesse d'Élide*); the charcoal-burner's whistle (in *Acis*); and, like the composer of *Siegfried*, he did not fear the sound of the forge and the noise of anvils (in *Isis*). The characteristic trait of the Orchestra (and one essentially French) is that Lully rarely employed it all at once. He divided his Orchestra into groups that have conversations with one another, or with the voices. This system puts lots of light into the picture, as it were, and the air circulates freely. Strangers were always struck by this.

"Lully's Orchestra was large. It was carefully recruited and trained by him. The violins were extraordinary, especially in 'the first stroke of the bow.'

People came from Italy, England and Germany to hear Lully's Orchestra. Everybody admired his correctness, rhythm, the perfection of his *ensemble;* and, above all, the sweetness, preciseness and smoothness of his violins." [1]

And now let us see what a contemporary has to say:

"Lully would have nothing but good instrumentalists. He tested them first by making them play *Les songes funestes* from *Atys*. It was a nimble hand that he demanded. After all, ease of execution was a reasonable qualification to require. He supervised all the rehearsals; and he had so nice an ear that from the far end of the theatre he could detect a violinist who played a wrong note. And he would run up to the man and say, 'You did that. It is not in your part.' The artists knew him and they tried to do their work well. The instrumentalists particularly never dared to embellish their parts, for he would not allow any more liberties from them than he would from the singers. He thought it far from proper that they should assume a greater knowledge than his own and add what notes they pleased to their tablature. If this happened he became angry and would make lively corrections. More than once he broke a violin on the back of a man who was not playing to his taste. But when the rehearsal was over, Lully would send for the man, pay him three times the value of his instrument and take him out to dine."

This characteristic little picture well shows the methods of the conductor.

[1] Romain Rolland.

JEAN BAPTISTE LULLY

Now these were neither ordinary men, nor ordinary musicians, whom Lully was accustomed to strike with their instruments. Some of them were indeed famous in their art and friendships. It only proves how supreme Lully was that they would submit to his temper and rude treatment. Evidently it was a distinction to play in Lully's Orchestra. So they put up with anything at rehearsals.

Take, for instance, Descoteaux, one of the most famous flute-players of the time. Descoteaux was a great friend of Boileau, Molière and La Fontaine. He lived to be very old, and Marais (the *viola da gamba* of Lully's Orchestra) speaks of him in his *Journal* in 1723 as follows: "During the *fêtes* I saw Descoteaux, whom I thought was dead. It was he who carried the German flute to its highest point and who brought to perfection the pronunciation of words in singing according to the rules of grammar. The value of literature he understood better than anybody. He sang words very correctly. Descoteaux had the love of flowers to a supreme degree and he was one of the greatest amateur florists in Europe. He lives in the Luxembourg, where they have given him a little garden, which he cultivates himself. La Bruyère has not forgotten to include him in his *Caractères* and that fad of his for tulips, to which he gave names as he pleased. He wants to be a philosopher now and talk Descartes; but it is quite enough to be such a musician and such a florist."

Thirty years before, when the tulip mania had spread from Holland throughout Europe, causing people to win and lose large sums — fortunes indeed —

upon choice bulbs — and to spend time and money on the production of new species — (a fad so well described in Dumas's novel of *The Black Tulip*), La Bruyère wrote of Descoteaux in *De la Mode* (1691). He did not mention Descoteaux by name; but everybody knew for whom the pen-portrait was intended. Descoteaux had his garden then in the faubourg Saint-Antoine.

Here is La Bruyère's picture of Lully's first flute: "The florist has a garden in a faubourg. He runs to it at break of day and he visits it before he goes to bed. We see him as if he were planted and had taken root in the middle of his tulips and before the *Solitaire*. He opens his eyes wide; he rubs his hands with delight; he goes closer to look at it; he kisses it; his heart swells with joy, for he thinks he has never seen it look so beautiful. Then he leaves it for the *Orientale*. From the *Orientale*, he goes to the *Veuve* (the widow); then he goes to the *Drap d'or* (Cloth of Gold); then he goes to *Agathe;* and then he goes back to the *Solitaire*, where he takes root again. There he stands or sits, rapt, and forgets all about his dinner. How beautiful her shading, her stripes, her satiny, oily skin! How lovely her chalice! He gazes upon her, admiring God and nature in her; and he would not give up that tulip bulb for a thousand *écus*. But he will be glad to give it away for nothing when tulips go out of fashion and pinks come in. This sensible man, who has a soul and a religion, as well as a fad, returns home fatigued but very contented; for he has seen his tulips!"

Descoteaux was a great virtuoso. So was Philbert,

who was also a member of Lully's Orchestra. Descoteaux and Philbert often played together; and they often played with Vizé, who was just as celebrated on the theorbo and guitar as they were on the flute.

Philbert was famous for his gayety, his wit and his talent for mimicry. He saw the ridiculous in everything and everybody; and he burlesqued everything and everybody to make his friends scream with laughter.

In his chapter on *Des Femmes*, La Bruyère touches him off under the name of Dracon. Addressing Lélie, he says: "But you have Dracon, the flute-player! No one else in his profession can puff out his cheeks so decently in blowing into an oboe, or a flageolet. The number of instruments that he can make talk is infinite! Pleasanter still, he can make children and young women laugh! Who can eat and drink more than Dracon at a single meal? Dracon enlivens a whole company, and he is always the last to get up!"

Poor Dracon had a sad love-story. A woman fell in love with him — not an unusual thing to happen with Philbert — but she poisoned her husband so that nothing might stand in the way of marrying him. At the last moment she confessed her crime; and she was hanged and burned in the old *Place de Grève* in Paris. Philbert was perfectly innocent; but he, doubtless, suffered terribly — poor fellow!

An artist's life is not always a happy one!

Both Descoteaux and Philbert were great favorites of Louis XIV. As the Philidor and Hotteterre families were renowned for their skill on the flute, oboe and

bassoon, some of them, undoubtedly, played in Lully's Orchestra. These families were famous in musical Paris for generations.

One of the bassoons was La Bas. He married an opera-singer, named Mlle. Le Rochois. The marriage was somewhat unusual. Mr. Bassoon wrote his promise to marry the lady on the back of a card — the Queen of Spades (*Pique Dame*) and then he tried to get out of it; but the lady showed the Queen of Spades to Lully; and Lully made Mr. Bassoon keep his promise.

Conductors have many duties!

One of the first violins, Verdier, was also the husband of an opera-singer; but we do not know the story of his marriage.

Then there was Jean Baptiste Marchand, who played the lute and also the violin. He wrote such a fine Mass that it was performed in the noble old cathedral of Notre-Dame of Paris.

Then there was Teobaldo di Gatti, a native of Florence, who was so charmed with the "symphonies" in some of Lully's operas that he had heard (and perhaps played in) that he went to Paris in 1676 especially to see Lully. As soon as he arrived, he hurried to call on the great composer and conductor and told him why he had taken the journey. Lully was highly flattered; and, after hearing him play, he recognized his ability and gave him a place in the Orchestra at once. And here Teobaldo, the *basse de viol*, played for fifty years! He died in 1727, playing in the Orchestra up to the last. Teobaldo was a very well-known figure in Paris; and everybody went

to hear his opera, *Scylla*, when it was performed in Paris.

Perhaps the best musicians in all this Orchestra of *virtuosi* were the two violinists, Lalouette and Collasse, and the bass violist, Marais, whose snap-shot of a fellow-member is quoted on page 165. Each of these three artists became Lully's assistant conductor.

Jean François Lalouette, the first of Lully's conductors, was born in 1615. He studied the violin under Guy Leclerc (one of the Twenty-Four Violins) and began to play under Lully when he was only twenty. First he played among the violins; and then Lully made him his secretary and put him to writing recitatives. He also instrumented some of Lully's operas. But when he boasted that he had composed the best parts of Lully's opera of *Isis*, Lully discharged him. Lalouette then devoted himself to composition. Finally, he became *maître de chapelle* at Notre-Dame, Paris. He died in 1728. When Lalouette was dismissed in 1677, Lully gave his place to Pascal Collasse.

Collasse was born in Rheims in 1649. At an early age he was taken to Paris, where he became a chorister at St. Paul's and a pupil of Lully. He was more fortunate than Lalouette, for he stayed with Lully until the latter's death and completed his operas that were left unfinished.

Marin Marais was conductor at the same time as Collasse. Perhaps they alternated, perhaps there was so much to do that two were kept busy. It looks as if Lully only conducted when he wanted to — perhaps on a first performance of one of his operas. At any rate,

Marais and Collasse worked together. Marais was a Parisian and was born in 1656. He sang in the choir of Sainte-Chapelle and took lessons on the *basse de viole*[1] with Sainte-Colombe. At the end of six months Sainte-Colombe, seeing that his pupil was likely to surpass him, told him that he could teach him nothing more. But this did not satisfy Marais; for he loved the *basse de viole* passionately and wanted to perfect himself by learning from this master. At that time Sainte-Colombe used to practise in his garden in a little shed he had built around a mulberry-tree where he could be undisturbed. Marais hid behind the shed and listened to his master practise some very difficult passages and bowings that Sainte-Colombe wished to keep for himself. This did not last long because Sainte-Colombe found it out. The next time he heard Marais he congratulated him on his progress. Moreover, one day when Marais was playing for a company of great distinction, Sainte-Colombe, who happened to be present, was asked what he thought of Marais. He replied that "there were always pupils who could surpass their master, but that nobody would ever be found who could surpass Marais."

Marais became the best performer on the *basse de viole* of his time. It was Marais who gave the instrument a seventh string and it was he who wrapped the three lowest strings with wire. In 1685 he was soloist in the King's Chamber Music and he also played in Lully's Orchestra. Lully gave him lessons in composition. In 1686 he published a collection of pieces for

[1] Viola da Gamba.

MARIN MARAIS

the *basse de viole.* An *Idylle Dramatique* came out in the *Mercure de Paris* in 1693.

Marais wrote a great deal of music for the strings. "We know," writes a contemporary, "the fecundity and beauty of the genius of this musician by the number of works that he composed. They are astounding in taste and variety. His great knowledge appears in all his works; but particularly in two pieces: one, in his fourth book called the *Labyrinth,* where, after having gone through various scales and touched on diverse dissonances, and marked his way by grave tones and then by lively and animated ones, describing the uncertainty of a man who is going through a labyrinth, he comes out happily in a graceful and natural *Chaconne.* But he astonished connoisseurs still more by a piece called the *Scale — La Gamme —* a symphonic composition which mounts insensibly through all the notes in the octave and then descends again with harmonious and beautiful melodies through all the musical scales." [1]

Marais also wrote several operas, one of which, *Alcyone* (1706), had in it a storm that the people of the time thought perfectly terrific; for the drums rolled continually; the violins played on the highest string — the *chanterelle;* the oboes screamed; and the bass viols and bassoons added to the horrors in depicting the agitated sea and the whistling wind.

Many were shocked!

In 1725 Marais, very old, lived in a house in the rue de Lourcine and devoted himself to the cultivation of flowers. He also rented a room and gave lessons two or three times a week to talented pupils.

[1] *La Parnasse Francoise.*

Marais died in 1728.

Then there was La Londe, who began life as a *valet de chambre* to the Maréchale de Grammont. He was very talented and became one of the best violinists in Europe. Then there was another violinist known as Baptiste. It is supposed that he was Baptiste Anet, a pupil of Corelli. We know of a few other names: Nicholas Baudry, *dessus de violon;* Julien Bernier, German flute; Bernard Alberty, theorbo; Jean Théobalde, *basse de violon;* and Jean Rabel, clavecin. There was also connected with the Orchestra Jean Fischer (born in Swabia in 1650), who came to Paris when very young and belonged to Lully's orchestral family as a music-copyist.

An old document came to light in Paris several years ago that gave the pay-roll of Lully's Orchestra. Here it is:

| | | |
|---|---|---|
| Batteur de mesure | 1,000 | livres |
| 10 instruments de petit chœur à 6,000 | 6,000 | " |
| 12 dessus de violon à 400 | 4,800 | " |
| 8 basses à 400 | 3,200 | " |
| 2 quintes à 400 | 800 | " |
| 2 tailles à 400 | 800 | " |
| 2 hautes contres à 400 | 1,200 | " |
| 3 hautbois flutes ou basson à 400 | 3,200 | " |
| 1 timbalier à 150 | 150 | " |
| | 21,150 | livres |

This shows that there were forty men in the Orchestra and that the average pay was 400 livres. We also learn that the clavecin player received 600 livres. The ten instruments that had the biggest salary were, of course, Lully's pet *Petits Violons.* [1]

[1] See page 160.

The Abbé Raguenet, in comparing the Italian and French Orchestras of the time, says: "Besides all the instruments they have in Italy, we still have the oboes, which, with their equally soft and piercing tones have such advantage over the violins in 'airs of movement,' and also the flutes such as the illustrious Philbert,[1] Philidor, Descoteaux[2] and the Hotteterres know how to make wail in a manner so touching and to make sigh so amorously in our tender airs."

How we wish that we could go to one of the King's Little Suppers at Marly and hear a concert by this famous Orchestra! How we should like to hear Descoteaux and Philbert play a duet on their flutes, or hear the whole Orchestra play a Sarabande, or a Courante, under Lully's careful conducting!

Charles II of England had not been on the throne very long before he created an Orchestra of Twenty-Four Violins like that he had heard so many times with delight at the Court of Louis XIV.

The chief violinist and leader of this organization was Thomas Baltzar of Lübeck.

"His Majesty, who was a brisk and airy prince, coming to the crown in the flower and vigor of his age was soon, if I may so say," says Burney, "tired with the grave and solemn way which had been established by Tallis, Byrd and others, ordered the composers of his Chapel to add symphonies with instruments to their anthems; and thereupon established a select number of his private music to play the symphony and *ritournelles* which he had appointed.

"The old way of consorts was laid aside by the

[1] See page 167. [2] See page 165.

prince immediately after his restoration when he established his band of Twenty-Four Violins after the French model; and the style of Musick has changed accordingly. So that French Musick became in general use at Court and in the theatres. Indeed, performers on the violin had a lift into credit before this period when Baltzar, a Swede, came over and did wonders upon it by swiftness and double stops. But his hand was accounted hard and rough, though he made amends for that by often tuning in the lyre way and playing lessons conformable to it, which were very harmonious.

"During the first years of King Charles's reign all the Musick in favor with the *beau-monde* was in the French style, which at that time was rendered famous throughout Europe by the works of Baptiste Lully, a Frenchified Italian and master of the Court Musick at Paris, who enriched the French Musick by Italian harmony which greatly improved their melody. His style was theatrical; and the pieces called *branles*, or *ouvertures*, consisting of an *entrée* and a *courante* will ever be admired as the most stately and complete *mouvements* in Musick. All the composers in London strove hard to imitate Lully's vein. However, the whole tendency of the air affected the *foot* more than the *ear;* and no one could listen to an *entrée* with its starts and leaps without expecting a dance to follow.

"The French instrumental music, however, did not make its way so fast as to bring about a revolution all at once; for during a great part of this King's reign the old Musick was still used in the country

and in many private meetings in London; but *the treble viol was discarded and the violin took its place.*

"It may be ascribed to the peculiar pleasure which King Charles II received from the gay and sprightly sound of the violin that this instrument was introduced at Court and the houses of the nobility and gentry for other purposes than country-dances and festive mirth. Hitherto there seems to have been no public concerts and in the Musick of the chamber, in the performance of *Fancies* on instruments which had taken the place of vocal madrigals and motets the violin had no admission, the whole business having been done by viols.

"The use of the violin and its kindred instruments, the tenor and violoncello, in Court was doubtless brought from Italy to France and from France to England; for Charles II, who, during the Usurpation had spent a considerable time on the Continent, where he heard nothing but French Musick, upon his return to England, in imitation of Louis XIV, established a band of violins, tenors and basses, instead of the viols, lutes and cornets of which the Court band used to consist."

Anthony Wood, that quaint old English writer, also throws a light on the question of violin-playing in England at that time.

"The gentlemen in private meetings," he writes, "which A. W. frequented, played three, four and five parts with viols as treble viol, tenor, counter-tenor and bass, with an organ, virginal or harpsicon, joined with them; and they esteemed a violin to be an instrument only belonging to a common fiddler and could

not endure that it should come among them for fear of making their meetings to be vaine and fiddling. But after the Restoration of Charles I, viols began to be out of fashion and only violins used, as treble violin, tenor and bass violin; and the King, according to the French mode, would have Twenty-Four Violins playing before him while he was at meals, as being more airy and brisk than viols."

Then he goes on to tell us something about the chief violinist.

"Tho. Baltzar, a Lübecker born, and the most famous artist for the violin that the world had yet produced, was now in Oxford; and this day, July 24, A. W. was with him and Mr. Ed. Low, lately organist of Christ Church, at the house of Will Ellis, A. W. did then and there to his very great astonishment hear him play on the violin. He then saw him run up his fingers to the end of the finger-board of the violin and run them back insensibly and all with alacrity and in very good time, which he, nor any in England, saw the like before. A. W. entertained him and Mr. Low with what the house could then afford and afterwards he invited them to the tavern; but they being engaged to go to other company, he could no more hear him play, or see him play at that time. Afterwards he came to one of the weekly meetings at Mr. Ellis's house and he played to the wonder of all the auditory; and exercising his finger and instrument several ways to the utmost of his force. Wilson, thereupon, the public professor, the greatest judge of music that ever was, did, after his humorsome way, stoop down to Baltzar's feet to see whether he had a hoof on,

that is to say to see whether he was a devil or not, because he acted beyond the parts of man."

Burney goes on to say:

"We are able to ascertain the time when concerts consisting of two treble violins, a tenor and a bass violin, or violoncello, came into practice; that they had their origin in Italy can scarce admit of a question; and it is no less certain that they were adopted by the French.

"Indeed the idea of a performance where the instruments for the bass and intermediate parts were in number so disproportionate to the treble, seems to be absurd; and there is reason to suspect that the song 'Four and Twenty Fiddlers all in a row,' in D'Urfey's *Pills to Purge Melancholy*, was written in ridicule of that band of twenty-four violins, which, as the French writers assert, was the most celebrated of any in Europe."

This old song begins:

"*Four and twenty Fiddlers all in a Row;*
*And there was fiddle fiddle and twice fiddle fiddle.*
*'Cause 'twas my Lady's Birthday,*
*Therefore we kept holiday,*
*And all went to be merry.*

"*Four and twenty Drummers all in a Row,*
*And there was tantarra rara, tan, tantarra.*
*Rara, rara, rara rar, there was rub, etc.*

"*Four and twenty Tabors and Pipers all in a Row*
*And there was whif and dub,*
*And tantarra rara, etc.*"

and goes on in the same way for several verses.

The next name of importance after Lully is that of Corelli.

We must not imagine that Corelli suddenly appeared like a great shining star in a dark night. No artist ever leaps suddenly upon an astonished world. Every artist builds on the works of those who have gone before him.

To understand Corelli, we must go back a little and recall something that we have already noticed; and that is the importance of the work of the Italian violin-makers.

Let us then fix it in our minds that when Corelli was born, in 1653, Nicolò Amati had already made a great number of fine violins and that Stradivari was working all through Corelli's life and that he outlived him. So that the question of violin-playing was the chief one that engaged the attention of the composers of Corelli's time. They were all working on the question of *how to play the new instrument*, just as the makers had been, and were still working on the *technique* of the instrument itself. Amati and Stradivari, like those who had gone before them, were trying for *tone*. The composers were now trying to show off the voice, or *tone*, of the new instrument to the best advantage.

This question is of the greatest importance for us to remember, because *the violin is the very foundation of our modern Orchestra.*

At first the violin was the *prima-donna* of the Orchestra; but eventually the other members of the Violin Family — viola, violoncello and double-bass — also became singers. In short, the Violin Family became the very backbone of the Orchestra.

ARCANGELO CORELLI

Corelli had much to do with making this the case.

Before Corelli was born in Fusignano in 1653, the Italian composers, particularly those who were attached to the cathedrals and private Orchestras of the wealthy princes and lords of Lombardy — Brescia, Cremona, Mantua and Padua — who were right in the midst of the activities of violin-making, had been writing sonatas, "Flowers" and dances of all kinds for the new violin, to be accompanied by the spinet, the organ, or two or three other stringed-instruments. Their compositions gradually grew more elaborate as they discovered the possibilities of the last new model sent from the work-shop of Gasparo di Salò, Maggini, Amati, or Stradivari. There was a great deal more Italian music — and good music, too — composed at that time than most people have any idea of.

Arcangelo Corelli studied the violin under Giovanni Battista Bassani, a musician who is almost forgotten to-day, but who was a great violinist, a composer, a conductor of the Cathedral-music, first in Bologna and afterwards in Ferrara; and he was particularly happy in his writings for the string-quartet. Bassani was about the same age as Corelli; and to his pure instrumental style and knowledge of counterpoint Corelli and modern music owe not a little.

After studying the violin with this master, Corelli went to Rome and studied with Matteo Simonelli, who had had a splendid musical education.

Corelli travelled in Germany and was for a time attached to the Court of the Elector of Bavaria. Then he went to Paris in 1672, and, returning to Italy, settled in Rome. He became a favorite in society and

lived in the household of the splendid Cardinal Pietro Ottoboni, taking charge of that prince's music. His regular Monday concerts were a feature of the social and artistic life in Rome.

Pupils swarmed to him. One of them was Geminiani. Corelli became one of the great personages of Rome. When Christina of Sweden went to Rome, Corelli conducted an Orchestra of a hundred and fifty men in her palace. When he died in 1713 he was buried in the Pantheon, not far from Raphael. For years after his death a musical service was held annually at his tomb, where some of his compositions were piously played by his pupils.

Geminiani's estimate of Corelli's character seems very just. He said: "His merit was not depth of learning, like that of Alessandro Scarlatti; nor a great fancy, nor rich invention in melody or harmony, but a nice ear and most delicate taste, which led him to select the most pleasing harmonies and melodies and to construct the parts so as to produce the most delightful effect upon the ear."

At the time of Corelli's greatest reputation Geminiani asked Scarlatti what he thought of him. Scarlatti answered that "he found nothing greatly to admire in his composition, but was extremely struck with the manner in which he played his concertos and his nice management of his band and uncommon accuracy of the whole performance gave the concertos an amazing effect; and that, even to the eye as well as the ear"; for, continued Geminiani, "Corelli regarded it as essential to the *ensemble* of a band that their bows should all move exactly together, all up or all down; so, that

at his rehearsals, which constantly preceded every public performance of his concertos, he would immediately stop the band if he discovered one irregular bow."

"There can be no doubt that above all Corelli was a great violin-player and that all he wrote grew out of the very nature of his instrument. In his *Chamber-Sonatas* and *Concerto-Grossi* he must be considered the founder of the style of orchestral writing on which the future development is based; while in the *Sonatas* (op. 5) which have merely an accompanying fundamental bass, he gives a model for the solo sonata; and, thereby, for all writing for the violin as a solo-instrument.

"All his works are characterized by conciseness and lucidity of thought and form, and by a dignified, almost aristocratic, bearing. The slow movements show genuine pathos as well as grace, and bring out in a striking manner the singing-power of the violin.

"Corelli's *Gavottes*, *Sarabandes* and other pieces with the form and rhythm of dances, do not materially differ from similar productions of his immediate predecessors and contemporaries, although, like everything that he wrote, they are distinguished by great earnestness and dignity of style and are especially well adapted to the instrument. He was not so much an innovator as a reformer; he did not introduce new striking effects; it cannot be denied that his technique was a limited one — he never goes beyond the third position — but, by rigidly excluding everything that appeared to him contrary to the nature of the instrument, and by adopting and using in the best possible way everything

in the existing technique which he considered conformable to the nature of the violin, he not only hindered a threatened development in the wrong direction, but also gave to this branch of art a sound and solid basis, which his successors could, and did, build upon successfully."[1]

Burney tells us that "After the publication of Corelli's works, the violin seems to have increased in favor all over Europe. There was hardly a town in Italy, about the beginning of the present century (the Eighteenth), where some distinguished performer on that instrument did not reside."

The next link in our chain is Scarlatti.

Alessandro Scarlatti was born in Trapani, Sicily, in 1659. We find him at a comparatively early age settled in Naples, where he was celebrated as a singer, and a performer on the harp and the harpsichord and as a composer of operas. He was the chief of the Neapolitan School. Modern critics have proved that on his ideas the great Gluck built his musical edifice.

Scarlatti was a prolific composer. He wrote one hundred and fifteen operas and two hundred masses, besides oratorios, cantatas and other works.

He is of importance to the Orchestra because of the new way he wrote for the instruments. He made the accompaniment of vocal recitative of new importance and gave the Orchestra a great part to do throughout the entire opera. The strings formed the groundwork of his Orchestra; and he also used oboes, flutes, bassoons, trumpets, drums and horns (the latter an innovation).

[1] Paul David.

CONCERT BY SCARLATTI, TARTINI, MARTINI, LOCATELLI AND LANZETTI

Scarlatti was the creator of modern opera, and the "Father of Classical Music," the forerunner of Gluck, Mozart and Haydn and many others. Dr. Burney put the debt that great composers owe to Scarlatti concisely when he said: "I find part of Scarlatti's property among the stolen goods of all the best composers of the first forty years of the present century."

With regard to his treatment of the violoncello, Dr. Burney says:

"The violoncello parts of many of his cantatas were so excellent that whoever was able to do them justice was thought a supernatural being. Geminiani used to relate that Francischello, a celebrated performer on the violoncello at the beginning of this century, accompanied one of these cantatas at Rome so admirably, while Scarlatti was at the harpsichord, that the company, being good Catholics and living in a country where miraculous powers have not yet ceased, were firmly persuaded it was not Francischello who had played the violoncello, but an angel that had descended and assumed his shape."

Scarlatti also divided his strings into four parts and carefully balanced with them the wind instruments that he used; but the strings were the most important and stood out in relief against the wind; or, if we prefer to think of the matter another way, the wind was subordinate to the strings.

Very little is known regarding his private life.

His son, Domenico, was also a prolific composer and was a famous player on the harpsichord (*Gravicembalo*). To him is due the original idea of the *form of the Sonata which Haydn afterwards perfected.*

Domenico Scarlatti is remembered, too, for his "*Cat's Fugue*," written on the notes that his favorite cat touched one day when she walked down the keys of the harpsichord.

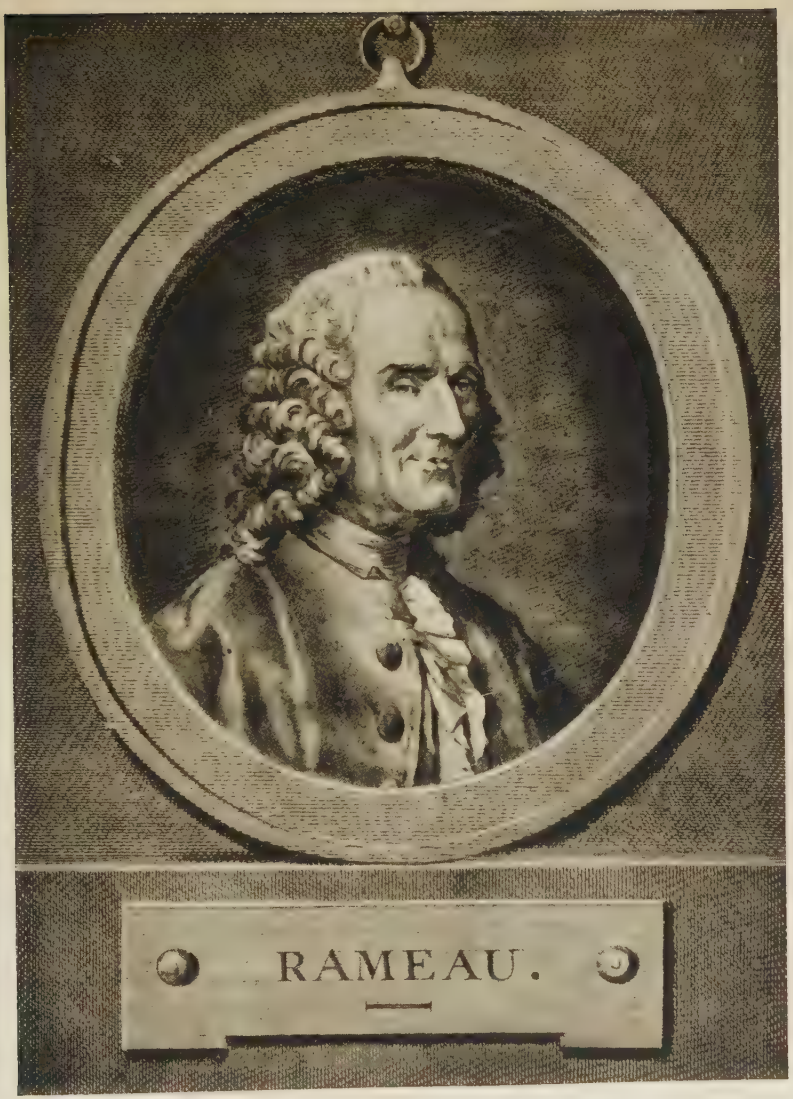
Next in line comes Rameau, who was born in Dijon, in 1683, just two years before Bach. He was at the height of his fame when Mozart was born. Rameau came of a musical family, showed his talent early, played the clavecin at seven and studied the violin and organ. Eventually he settled in Paris. First he wrote little musical comedies, and, finally, operas — *Hippolyte et Arcie, Les Indes Galantes, Castor et Pollux* are some of them — and ballets, which as M. Choquet truly says, "contain beauties which defy the caprices of fashion and will command the respect of true artists for all time." Rameau died in 1774. Rameau looked very much like Voltaire. He always used the violin when composing. Rameau's new ideas of orchestration created animosity among the followers of Lully.

What did Rameau do for the Orchestra?

*He gave to the different members of the Orchestra an individual rôle;* he extended the technique of the violins; he made an increasing use of arpeggios; and he was the first to use *pizzicato* chords with all the strings at once. He also made a delicate and light use of the woodwind.

Every day Rameau is taking a larger place in Music. French critics consider him the most *French* of all their composers.

While the Italian Renaissance had developed the opera, the dance and music that delighted the drawing-room, under the bright skies of Italy, in the colder




RAMEAU

*By Restout*

North, under the influence of stern Martin Luther, the *Chorale*, or hymn-tune, had arisen to supply the needs of the new Lutheran religion. The *Chorale* is austere and solemn, although melodious. It was largely owing to these chorales that the new Reformed religion made its way so rapidly among the people of Northern Germany. The sources of these Chorales were various: some came from old church-hymns; others, from folk-songs. A good example is the "*Old Hundredth Tune*" beginning "Praise God from whom all blessings flow."

The custom of playing these *Chorales* on the organ with elaborate accompaniments and treating them also as themes for fugues and counterpoint was a special fancy of the German organists.

Germany had the finest organists in Europe in the Seventeenth Century; and there was no greater one among them than Johann Sebastian Bach.

Moreover, no one understood the *Chorale* better, or made more use of it, than Bach.

Bach's life was uneventful. He was born in 1685 in Eisenach, near the Wartburg (celebrated for the legend of Tannhäuser), was organist at Weimar and *Kapellmeister* at Cothen for the Prince Leopold and Cantor of the Thomas School in Leipzig from 1723 until his death in 1750. He was also organist and director of the two chief churches in Leipzig.

Bach wrote every form of music except the opera. His industry was prodigious. "In Bach's hands the music of the period marked its climax of expression, the *Chorale* was idealized to its highest pitch, the combination of Orchestra, chorus and solo voices in the

Passions, the B-minor mass and the Church Cantatas became pillars of the house of musical art for all time, the principle of equal temperament [1] was fixed for good in Clavichord work, the *violin became a solo instrument which could speak unaided for itself,* and the organ came finally into its own. All this immense range of work was accomplished by an unobtrusive, unadvertising man of the highest moral force and of simple, deeply religious and deep-feeling character, a personality who would have considered it the highest possible tribute to be called the worthy father of a devoted family." [2]

When Bach and his son, Philipp Emmanuel, went to work to draw their family tree, they found they had fifty-three musicians to hang on the boughs.

The whole Bach family played the organ and every other keyboard instrument. They were all marvellous players of the harpsichord.

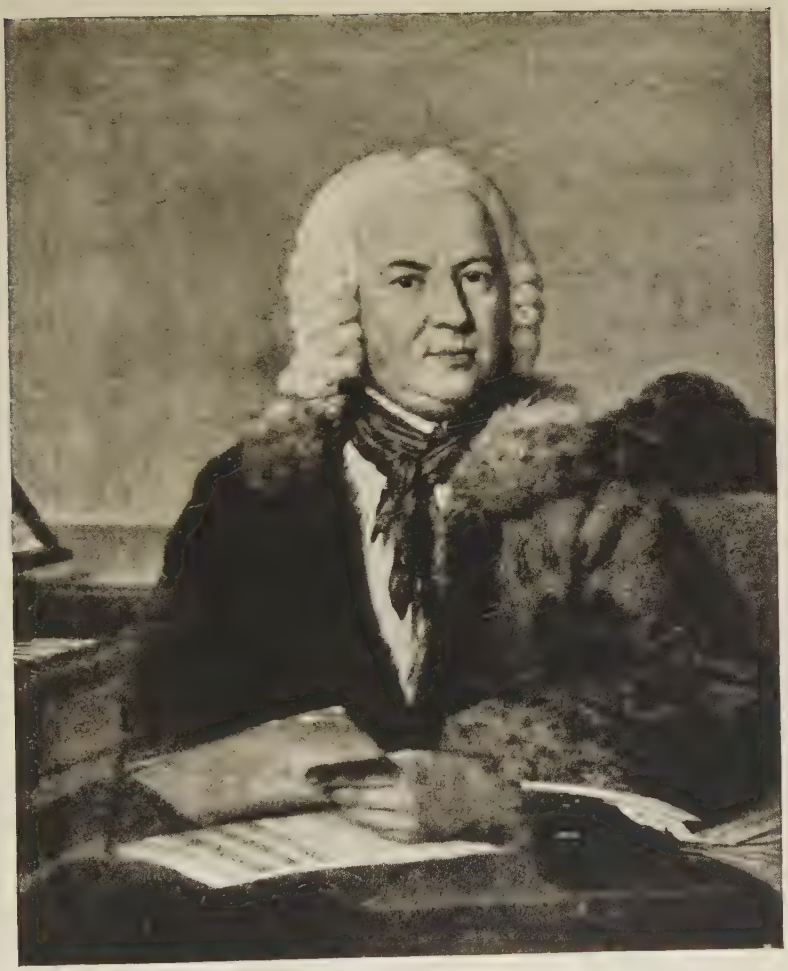
Bach's contribution to the development of the Orchestra is that he treated each separate instrument lovingly and as if it were an individual, so that *he prepared the way for the occasional solos in orchestral compositions.* He wrote for a great many instruments that were rapidly going out of fashion, such as the *oboe d'amore,* the *oboe di caccia,* the *viola d'amore* and the *viola da gamba.*

Bach stands at the parting of the ways of ancient music and modern music. Bach is the bridge between the Old and the New. He is often called the "musicians' musician."

Bach's four Overtures for Orchestra are usually

[1] Equal tuning.

[2] Charles Villiers Stanford.



JOHANN SEBASTIAN BACH

*By Lissewsky*

spoken of as *Suites;* but they are compositions on the Lully type. Critics have pointed out that Bach uses instruments to get the effect of *fulness* rather than *color.*

Bach's compositions for a solo violin, unaccompanied, are the most stupendous works ever written by anybody for a single instrument. Great players have always delighted in mastering their technical difficulties, which are very great.

Handel was born the same year as Bach, in 1685, though he seems a little nearer to us somehow. While Bach was living his quiet, uneventful life, Handel was gaining experience in the world. He was a native of Saxony and was the son of a surgeon, who considered music a degrading business. We know under what difficulties little Handel practised the spinet in the garret. The Duke of Saxe-Wessenfels heard him play and persuaded his father to let him follow the bent of his genius. Handel played in the Orchestra in the Opera House of Hamburg, "the Northern Venice," a cosmopolitan city where the people had the best of music.

Then Handel travelled in Italy, where he met the famous Alessandro Scarlatti [1] and had his opera of *Agrippina* performed. Then he went to the Court of Hanover to become *Kapellmeister.*

But Handel wanted a larger field for his activity, and so he went to London in 1710 and brought out several operas. Queen Anne was reigning at this time and her Court was famous for its brilliant literary men — Pope, Addison, Steele, Sheridan and many others;

[1] See page 182.

and Handel's music pleased many of the Court, as well as the Queen herself. In 1713 he wrote a *Birthday Ode* for her, which delighted Her Majesty. It was literally "to the Queen's taste."

But Queen Anne died in 1714; and a strange thing happened for Handel — the Elector of Hanover, his old patron, was called to the British throne as George I. Handel now became director of the King's Music.

In 1717 he left George I to become Chapel-master for the Duke of Chandos, who had a palace at Cannons, not far from London, where he lived in great magnificence. For instance, he had a guard of a hundred Swiss soldiers and a chapel like those of Italy. His Orchestra was of the best.

Handel stayed at Cannons three years and then he became director of the Italian opera in London, where he produced one opera after another, some of which brought forth witty satires from Addison and Steele, but all of which attracted large audiences. Most of them were on mythological subjects, were written in the Italian style and were superbly staged. Occasionally, a beautiful aria from one or another of these operas appears on a programme to-day; and it is so noble and lovely that we long to hear the old operas themselves. As a rule, these arias are accompanied by several instruments supporting one that plays an *obbligato* part; and these show what Handel did to develop and exhibit the *technique* of various instruments.

The last years of his life were devoted to composing the magnificent oratorios of *Saul, Samson, The Messiah* and *Israel in Egypt.*

HANDEL

*By Thomson*

Handel became a naturalized English subject and lived far into the reign of George II. When he died in 1751, he was buried in Westminster Abbey.

Handel's contribution toward building up our modern Orchestra is that he helped make it more solid, more sonorous and more vital.

The balance of Handel's Orchestra was very different from ours, because of the overwhelming number of woodwind instruments. If he had twenty-five strings, he would sometimes have as many as five oboes and five bassoons! The clarinet had not then come into use, and some stringed and some woodwind instruments that Handel used became obsolete after his death. Handel was particularly fond of the oboe: it is often conspicuous in his scores.

Handel made his Orchestra a very strong ally of his operas and his oratories. He conducted seated at the clavier, or organ, and accompanied the singers with the most marvellous art possible to imagine, following their fancies and pleasures and whims; and then, when they had finished, he would *improvise* to suit his own taste. His audience was always enraptured.

It is little wonder, therefore, that Handel's orchestration sounds scanty to our ears, if his works are played from the original scores; for we miss the filling in of all this elaborate work done on the spur of the moment and in all the excitement and exhilaration of the concert-hall before the audience who had learned what to expect.

We are told that when Handel conducted one of his oratorios the chorus had their leaders who listened to the organ from which they took their cues. The

Orchestra was divided into three sections. Section No. I was the *Concertino*, consisting of a first and second violin and a solo violoncello. Section No. II was the *Concerto Grossi*, consisting of eight first violins, eight second violins, six violas, four to six violoncellos and four double basses. Section No. III was the *Ripienist*, or the supplementary band, consisting of six first violins, six second violins, four violas, three to four violoncellos and three basses. This *Ripienist* band was employed to fill in the harmonies, or to support the solos, and the *concertante* parts.

The picture facing this page, taken from an old print in the British Museum, represents Handel seated at the clavecin (a *cembalo* with two keyboards), of which the lid is raised. On his right hand is the violoncellist. Before his eye are two violins and two flutes. The solo singers are near him, on his left, close to the clavecin. The rest of the instrumentalists are behind him, out of sight. "Thus his directions and his glances would control the *Concertino* who would transmit, in their turn the chief conductor's wishes to the *Concerto Grossi* and they, in their turn, to the *Ripienists*. In place of the quasi-military discipline of the modern Orchestra, controlled under the *bâton* of a chief conductor the different bodies of the Handelian Orchestra governed one another with elasticity; and it was the incisive rhythm of the *cembalo* that put the whole mass into motion." [1]

We rarely hear any of Handel's music with exactly the Orchestra for which he wrote. All conductors realize the difficulty of having anyone improvise

[1] Romain Rolland.

HANDEL CONDUCTING THE ORCHESTRA

*Handel at the Cembalo*

on the organ, or piano, to fill in the bald and empty spaces. Moreover, it would confuse the singers and terrify the audience. Improvising at concerts has gone out of fashion.

This was even realized in Mozart's day; and so Mozart wrote those beautiful "additional accompaniments" to *The Messiah*, which give to that oratorio no little of its grace and nobility. Mozart, as we know, was a genius in instrumentation and even in his day people demanded something different from the Handelian concert.

Handel, however, was always seeking for novel effects. He was one of the first to introduce the horn into the Orchestra and he was "the first to assert the expressive personality of the violoncello." [1] He also appreciated the fantastic and lugubrious quality of the bassoons; experimented with all kinds of instruments; and used the kettledrums as a solo for Jupiter's oath in *Semele*. This was so unusual and so startling that Sheridan in his burletta on *Jupiter* had a pistol fired suddenly, upon which one of the characters exclaims: "This hint I took from Handel!"

Handel was considered horribly noisy in his day. His friend, Goupy, the artist, made a caricature that doubtless amused Handel, who saw himself represented at the organ as a huge, unwieldy figure with a boar's head and enormous tusks (referring to his violent temper) and the room full of horns, trumpets and kettledrums, while a donkey is also present braying loudly and in the distance a battery of artillery is ready for action.

[1] Volbach.

It is noticeable, too, in Handel's Orchestra, as in Bach's, that we get no (or very little) tone-color. Handel's Orchestra is neutral in tint. The organ and the keyboard idea is still prevailing — all the instruments combine, as it were, to produce the one hue.

"But great painter as Handel was, he did not work so much through the brilliancy, variety and novelty of his tone-colors as by the beauty of his designs and his effects of light and shade. With a voluntarily restrained palette and by satisfying himself with the sober colors of the strings, he yet was able to produce surprising and thrilling effects. Volbach has shown that he did not contrast and mix his strings but divided the same family of instruments into different groups. In the introduction to *Esther* (1732), the violins are divided into five groups, in the *Resurrection* (1708) into four groups. The violas are sometimes divided into two, the second group being reinforced by the third violin, or the violoncellos. On the other hand, when Handel wanted to do so, he reduced his instrumental forces by suppressing the viola and the second violin, whose places were taken by the clavecin. All his orchestral art is the true instinct of balance and economy, which, with the most restricted means in managing a few colors yet knows how to obtain as powerful impressions as our musicians to-day with their crowded palettes.

"One is prone to accept too readily the idea that expressive *nuance* is the privilege of modern musical art and that Handel's Orchestra knew only the great theatrical contrasts between force and sweetness, or

loudness and softness. It is nothing of the kind. The range of Handel's *nuances* is extremely varied. We find with him *pianissimo, piano, mezzo piano, mezzo forte, un poco più F., un poco F., forte, fortissimo.* We never find the orchestral *crescendo* and *decrescendo,* which hardly appears marked until the time of Jomelli and the school of Mannheim; there is no doubt, however, but that it was practised long before it was marked in the music. The President of Brosses wrote in 1739 from Rome: 'The voices like the violins used with light and shade with unconscious swelling of sound, which augments the force from note to note, even to a very high degree since its use as a *nuance* is extremely sweet and touching.' And endless examples occur in Handel of long *crescendi* and *dimuendi* without their expression being marked in the scores. Another kind of *crescendo* and *dimuendo* — made on the same note — was very common in the time of Handel. His friend, Geminiani, helped to set the fashion.

"As Geminiani explains it: 'The sound ought to commence softly and should swell out in a gradual fashion to about half its value. Then, it should diminish to the end. The movement of the bow should continue without interruption.'" [1]

Padre Martini said that Gluck combined in the music-drama "all the finest qualities of Italian and many of those of French music with the great beauties of the German orchestra."

Gluck began where Handel left off. Handel had already treated mythological subjects. He had also

[1] Romain Rolland.

written an *Alceste* and an *Armida* before Gluck appeared on the scene. Handel (who is said not to have liked Gluck at all) was Gluck's chosen master on account of "the wonderful beauties of his melodies, the grandeur of his style and his rhythms like armies on the march."

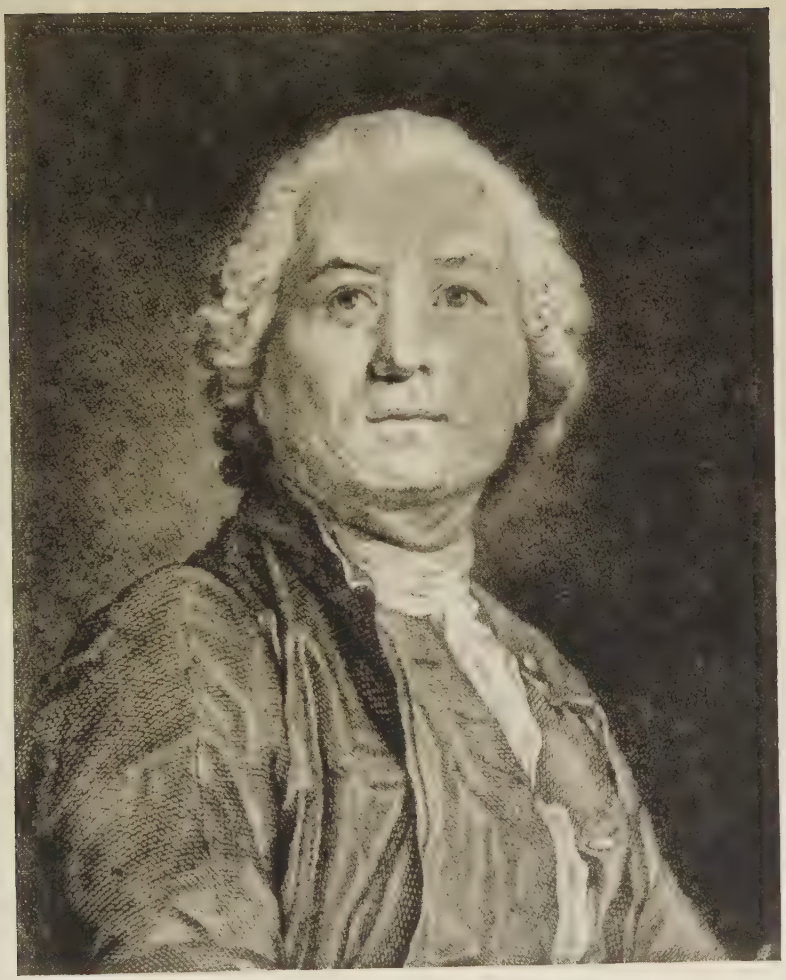
Gluck not only followed Handel, but he adored him. He kept Handel's portrait over his bed!

"Gluck gave the Orchestra a new life, assigning the first place to it in some cases, letting it express the feeling that captivates the listener. With him violins, oboes and trombones are not merely sonorous agents; they are living entities, personages of action. Through the Orchestra he adds dazzling beauty to a temple scene, or a scene in the Elysian Field; and by little touches on certain instruments here and there he can make us feel the mystery of the infernal regions. Gluck's great gift to the Orchestra was to make it *speak*." [1]

Christoph Willibad Gluck was born near Neumarkt in the Upper Palatinate (Austria) in 1714. He was educated in music in Prague and in Vienna; and fortunately attracted the attention of Prince Melzi, who took him to Milan to direct his private Orchestra. We all know how his successful operas in Vienna prepared the way for still greater triumphs in Paris, where Gluck enjoyed the patronage of the Queen Marie Antoinette, who, being an Austrian, had known and loved Gluck's works in Vienna.

All the histories and memoirs of the time speak of the quarrel between the followers of Gluck and Piccini.

[1] Julien Tiersot.



GLUCK

*By Duplessis*

Piccini represented the old Italian style and Gluck stood for the new dramatic style — the latest thing out it happened to be. The Piccinists accused Gluck of composing operas with little melody, no truth to nature, little elegance or refinement, and a noisy Orchestra. "Gluck's modulations," they said, "were awkward and he had no originality, no finish, no polish." In short, Gluck was everything that was abominable.

Dr. Burney informs us that: "No door in Paris was opened to a visitor without the question being asked — 'Monsieur, are you a Picciniste, or a Gluckiste?'"

The Piccinists are forgotten: the Gluckists still live. We are among them; for, to our way of thinking, nothing more noble and inspired than *Orfeo* was ever written. And if polish and elegance are to be found anywhere in music, they appear in the scores of Gluck.

"Yet, if he had merely carried to perfection the work begun by Lully and Rameau; if his efforts had been limited to removing the harpsichord from the Orchestra, introducing the harp and trombones, employing the clarinets, scoring with skill and effect, giving more importance and interest to the overture and using with such magic effect the artifice of momentary pauses to vary or emphasize speech in music, — if he had done no more than this, he would have earned our gratitude, but he would not in that case have been one of the monarchs of art.

"What then did he accomplish that was so extraordinary?

"He grasped the idea that the mission of music

was not merely to afford gratification to the senses, and he proved that the expression of moral qualities is within its reach. He disdained all such tricks of the trade as do not appeal to the heart — in fact, he preferred the Muses to the Sirens. He aimed at depicting historic, or legendary, characters and antique social life; and in his works of genius he put into the mouths of each of his heroes accents suited to their sentiments and to the spirit of the time in which they lived. He made use of the Orchestra to add to the force of a dramatic situation, or (in one noble instance) to contrast external repose with the internal agitation of a remorseful conscience. In a word, all his French operas show him to have been a noble musician, a true poet and a deep thinker."

Gluck also contributed to the development of the ballet and made the dance a vital part of the story of the opera, as, for instance, the ballet of the Spirits of the Blest in *Orfeo*.

His ballet-music is very beautiful in form and melody and choice of instruments that play it.

"With Gluck," says Romain Rolland, "the ballet lost some of the delightful exuberance it had had in Rameau's operas; but what it lost in originality and richness, it gained in simplicity and purity; and the dance airs in *Orfeo* are like classic bas-reliefs, the frieze of a Greek Temple."

"To think," said Beethoven in his last days, looking at a picture of Haydn's birthplace, "that so great a man should have first seen the light in a peasant's wretched cottage!"

Haydn's career once again proves that genius

finds its level in the world. Haydn was born of poor parents in Rohrau, a small Austrian village near the borders of Hungary, in 1732. We all know how as a child he sang in the choir at St. Stephen's in Vienna and played the kettledrums, piano and violin. At an early age he began to compose; and when he was about thirty he became assistant director of music in Prince Esterhazy's house at Eisenstadt.

The story of Haydn's entering into the service of one of the most important princes in Europe is interesting.

Haydn had attracted the attention of Prince Esterhazy by one of his symphonies; and friends of Haydn's arranged that he should compose a symphony to be performed at Eisenstadt on the Prince's birthday.

"Haydn executed it and it is worthy of him. The day of the ceremony having arrived, the Prince, seated on his throne and surrounded by his court, attended at the usual concert. Haydn's symphony was begun. Scarcely had the performers got to the middle of the *first Allegro*, than the Prince interrupted them and asked who was the author of that fine composition.

"'Haydn,' replied Friedberg, and he made the poor young man, all trembling, come forward.

"'What!' exclaimed Prince Esterhazy, 'is it this Moor's music?' (Haydn's complexion, it must be confessed gave some room for this sarcasm.) 'Well, Moor,' he said, 'from henceforth you remain in my service. What is your name?'

" 'Joseph Haydn.'

"'Surely I remember the name. You are now engaged to me. Go and dress yourself like a professor. Do not let me see you any more in this trim. You cut a pitiful figure. Get a new coat, a wig and buckles, a collar and red heels to your shoes; and I particularly desire that your shoes may be high, in order that your stature may correspond to your intelligence. You understand me? Go your way and everything will be given to you.'

"Haydn kissed the Prince's hand, and retired to a corner of the Orchestra, a little grieved at being obliged to hide his natural hair and youthful figure. The next morning he appeared at his Highness's Levee imprisoned in the grave costume which had been ordered. He had the title of Second Professor of Music, but his new comrades called him simply *the Moor*."[1]

In 1762 Prince Nicolaus Esterhazy succeeded his brother and Haydn soon became head of the entire music of the household. The "Magnificent Prince Esterhazy," as he was called, now turned an old hunting-lodge into a splendid residence, making it a miniature Versailles. The house was not only palatial, but there were deer-parks, gardens, hothouses, summer-houses, temples, grottoes, "hermitages," two theatres equipped with scenery and also a chapel. The musical establishment was large. The Prince paid big salaries and the musicians were engaged for several years at a time. There was a large opera company, a large Orchestra and individual solo players on certain instruments. Haydn had

[1] Henri Marie Beyle (Stendhal).

charge of it all. He was on friendly terms with Prince Esterhazy himself, for whose *viola di bardone*, or *baryton*, he had to write a new piece every day. Haydn lived at "Esterhazy," as the place was called, until Prince Nicolaus died in 1790. Then he went to Vienna, where he died in 1809.

Haydn was fortunate in having such a patron as Prince Esterhazy; for, of course, he had no trouble in getting his works performed. For thirty years he had an opera-house, an Orchestra — and both of the best — and a cultivated audience as well; for Prince Esterhazy entertained royal and noble personages and amateurs from every nook and corner of Europe.

When Haydn first went to Eisenstadt the Orchestra numbered eighteen instruments, six violins, viola, violoncello, double-bass, flute, two oboes, two bassoons and four horns. Then it was enlarged to twenty-two and twenty-four instruments, including trumpets and kettledrums. There was a great advance in the Orchestra of Esterhazy as the years rolled by; and the last symphonies that Haydn wrote are very much richer than his early ones.

Haydn represents the Orchestra in the same way that Gluck represents the music-drama, Bach the organ and Handel the oratorio. He has been called the "Father of the Orchestra"; and the name, "Papa Haydn," that Mozart gave to him, has been affectionately retained by posterity.

Haydn fixed the form of the quartet and the Symphony. Mozart and Beethoven were his actual pupils as well as followers. Yet from Mozart, Haydn learned much in the way of writing for instruments. Haydn

left the Orchestra in shape for Beethoven to carry still farther.

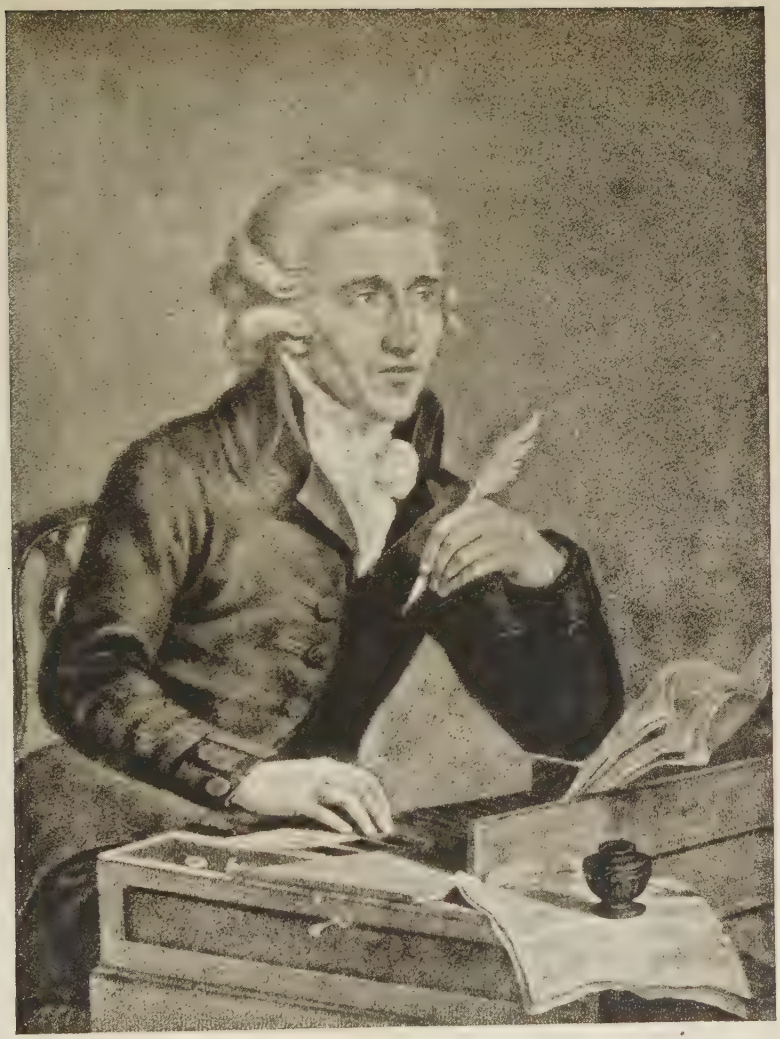
Haydn's Orchestra consisted of the string-quartet, two flutes, two oboes, two clarinets, two bassoons, two horns, two trumpets and kettledrums.

His practical knowledge of the kettledrums made him very partial to them; and he was the first to give this instrument an individuality and artistic part in the Orchestra.

Haydn introduced a loud blow on the kettledrum in the *Surprise Symphony* to startle and wake up the audience. "Here all the women will scream," he laughingly said when he wrote the part.

Regarding Haydn's quartets we have the following clever and humorous analysis by Stendhal:

"An intelligent woman said that when she heard a quartet of Haydn's she fancied herself present at the conversation of four agreeable persons. She thought that the first violin had the air of an eloquent man of genius of middle age who supported a conversation, the subject of which he had suggested. In the second violin she recognized a friend of the first, who sought by all possible means to display himself to advantage, seldom thought of himself and kept up the conversation rather by assenting to what was said by the others than by advancing any ideas of his own. The alto was a grave, learned and sententious man. He supported the discourse of the first violin by laconic maxims, striking for their truth. The bass was a worthy old lady, rather inclined to chatter, who said nothing of much consequence, and yet was always desiring to put in a word. But she



HAYDN

*By Gutenbrunn*

gave an additional grace to the conversation, and while she was talking, the others had time to breathe. It was, however, evident that she had a secret inclination for the alto, which she preferred to the other instruments."

Stendhal, who knew Haydn well, also writes:

"You must know, my friend, that before Haydn, no man had conceived the idea of an Orchestra composed of eighteen kinds of instruments. He is the inventor of *prestissimo*, the very idea of which made the old square toes of Vienna shudder. In music, as in everything else, we have little conception of what the world was a hundred years back; the *Allegro*, for instance, was only an *Andantino*.

"In instrumental music Haydn has revolutionized the details as well as the masses. It is he who has obliged the wind instruments to execute *pianissimo*.

"In the same way as Leonardo da Vinci sketched in a little book which he always carried with him the singular faces he met with, Haydn also carefully noted down the passages and ideas which came into his head. When he was in good spirits and happy he hastened to his little table and wrote subjects for airs and minuets. Did he feel himself disposed to tenderness and melancholy, he noted down themes for *Andantes* and *Adagios;* and, afterwards, in composing, when he wanted a passage of such a character, he had recourse to his note-book.

"Haydn, like Buffon, thought it necessary to have his hair put in the same nice order, as if he were going out, and dressed himself with a degree of magnificence. Frederick II had sent him a diamond ring; and

Haydn comfessed that, often, when he sat down to his piano, if he had forgotten to put on his ring, he could not summon a single idea. The paper on which he composed must be of the finest and whitest possible; and he wrote with so much neatness and care that the best copyist could not have surpassed him in the regularity and clearness of his characters. It is true that his notes had such little heads and slender tails that he used, very properly, to call them his *flies' legs.*

"It is said that no man had such a knowledge of the various effects and relations of colors and the contrasts which they were capable of forming as Titian. Haydn, likewise, possessed an incredible acquaintance with each of the instruments which composed his Orchestra. As soon as his imagination supplied him with a passage, a chord, or a single note, he immediately saw by what instrument it should be executed, in order to produce the most sonorous and agreeable effect. If any doubt arose during the composition of a symphony, his situation at Eisenstadt enabled him easily to resolve it. He rang his bell in the way agreed on to announce a rehearsal; the performers repaired to the rehearsing-room. He made them execute the passage which he had in his mind in two or three different ways; and, having made his choice, he dismissed them and returned to resume his composition.

"Sometimes he supposed that one of his friends, the father of a numerous family, ill provided with the goods of fortune, was embarking for America in the hope of improving his circumstances. The first events of the voyage formed the symphony. It

began with the departure. A favorable breeze gently agitated the waves. The ship sailed smoothly out of the port; while on shore the family of the voyager followed him with tearful eyes and his friends made signals of farewell. The vessel had a prosperous voyage and reached at length an unknown land. A savage music, dances and barbarous cries were heard towards the middle of the symphony. The fortunate navigator made advantageous exchanges with the natives of the country, loaded his vessel with rich merchandise and at length set sail for Europe with a prosperous wind. Here the first part of the symphony returned. But soon the sea begins to be rough, the sky grows dark and a dreadful storm confounds together all the chords and accelerates the time. Everything is in disorder on board the vessel. The cries of the sailors, the roaring of the waves, and the whistling of the wind, carry the melody of the chromatic scale to the highest degree of the pathetic. Diminished and excited chords, modulations, succeeded by semitones, describe the terror of the mariners.

"But, gradually, the sea becomes calm, favorable breezes swell the sails and port is reached. The happy father casts anchor in the midst of the congratulations of his friends and the joyful cries of his children and of their mother, whom he at length embraces safe on shore. Everything at the end of the symphony is happiness and joy.

"I cannot recollect to which of the symphonies this little romance served as a clue. I know that he mentioned it to me, as well as to Professor Pichl, but I have totally forgotten it.

"For the subject of another symphony, Haydn had imagined a sort of dialogue between Jesus Christ and an obstinate sinner, and afterwards followed the parable of the Prodigal Son.

"From these little romances were taken the names by which our composer sometimes designated his symphonies. Without the knowledge of this circumstance, one is at a loss to understand the meaning of the titles *The Fair Circassian, Roxalana, The Hermit, The Enamoured Schoolmaster, The Persian, The Poltroon, The Queen, Laudohn,* all which names indicate the little romance which guided the composer. I wish the names of Haydn's symphonies had been retained instead of the numbers."

When Dr. Burney had nearly finished his immense *History of Music* he wrote the following words:

"I am now happily arrived at that part of my narrative where it is necessary to speak of Haydn, the admirable and matchless Haydn! from whose productions I have received more pleasure late in my life, when tired of most other Music, than I ever received in the most ignorant and rapturous part of my youth, when everything was new and the disposition to be pleased undiminished by criticism, or satiety.

"The first time I met with his name in the German catalogues of Music is in that of Breitkopf of Leipzig, 1763, to a *Divertimento a Cembalo, 3 Concerti a Cembalo, 6 Trios, 8 Quados,* or *Quartets,* and *6 Symphonies in four.* The chief of his early music was for the Chamber. He is said at Vienna to have composed before 1782 a hundred and twenty-four pieces for

the *baryton*, for the use of his prince, who is partial to that instrument and a great performer upon it. Besides his numerous pieces for instruments he has composed many operas for the Esterhazy theatre and Church Music that has established his reputation as a deep contrapuntist.

"His innumerable symphonies, quartets and other instrumental pieces, which are so original and so difficult, have the advantage of being rehearsed and performed at Esterhazy under his own direction, by a band of his own forming, who have apartments in the palace and practise from morning to night in the same room, according to Fischer's account, like the students in the conservatories of Naples.

"Ideas so new and varied were not at first so universally admired in Germany as at present. The critics in the northern parts of the empire were up in arms. And a friend at Hamburg wrote me word in 1772 that 'the genius, fine ideas and fancy of Haydn, Ditters and Filtz were praised, but their mixture of serious and comic was disliked, particularly as there is more of the latter than the former in their works; and as for rules, they knew but little of them.' This is a censure which the admirable Haydn has long since silenced; for he is now as much respected by professors for his science as invention. Indeed his compositions are in general so new to the player and hearer that they are equally unable, at first, to keep pace with his inspiration. But it may be laid down as an axiom in Music that whatever is *easy* is *old*, and what the hand, eye and ear are accustomed to; and, on the contrary, what is *new* is, of course,

*difficult*, and not only scholars but professors have it to learn. The first exclamation of an embarrassed performer and a bewildered hearer is, that the Music is very *odd*, or very *comical;* but the queerness and the comicality cease, when, by frequent repetition, the performer and hearer are at their ease. There is a general cheerfulness and good humor in Haydn's *Allegros* which exhilarate every hearer. But his *Adagios* are often so sublime in ideas and the harmony in which they are clad that though played by inarticulate instruments they have a more pathetic effect on my feelings than the finest opera air united to the most exquisite poetry. He has likewise movements that are sportive, *folâtres*, and even grotesque, for the sake of variety; but they are only the *entremets*, or rather *intermezzi*, between the serious business of his other movements."

Haydn's *Symphonies* are to-day considered very simple and easy, so it is interesting to learn from Dr. Burney that a hundred years ago they were thought difficult and full of new effects and violent contrasts.

What would Dr. Burney have thought of Richard Strauss!

And now let us place by the side of Dr. Burney's criticism one by a writer of to-day, which will show us how Haydn is regarded at the present time.

"Of Haydn's general style as a composer it is hardly necessary to speak. To say that a composition is 'Haydnish' is to express in one word what is well understood by all intelligent amateurs. Haydn's music is like his character — clear, straightforward,

fresh and winning, without the slightest trace of affectation, or morbidity. Its perfect transparency, its firmness of design, its fluency of instrumental language, the beauty and inexhaustible invention of its melody, its studied moderation, its child-like cheerfulness — these are some of the qualities which mark the style of this most genial of all the great composers." [1]

Mozart was, perhaps, the greatest musical genius that ever lived. There was no branch of music in which he did not shine. His life was short. He only lived thirty-five years, but every moment of it was full of music and experience.

Wolfgang Amadeus Mozart was born in Salzburg in 1756 and died in Vienna in 1791. He picked out chords on the harpsichord when he was only a baby and began to compose when he was but four years old. His sister was also a musical genius; and his father, Leopold Mozart, a violinist of reputation, took these two children on concert tours throughout Europe. They visited all the German cities, Paris and London, and in 1769–1770 they travelled through Italy, where Mozart performed in Rome the great feat of writing from memory Allegri's famous *Miserere* performed in the Sistine Chapel during Passion Week.

In reviewing Mozart's life it seems almost impossible that anyone could have composed so many works, travelled so much and lived so much in the world besides. His long list of compositions includes operas, church-music, pieces for the piano, chamber-music, concertos for nearly every kind of known

[1] J. Cuthbert Hadden.

instrument; and for the Orchestra there is an astonishing number of works, among which forty-nine *Symphonies* are included!

Such genius cannot be accounted for, nor explained: it has to be accepted. We cannot stop to talk of his many great works. We can only say that the older one grows and the more musical knowledge and experience one has, the more one appreciates the charm and greatness of Mozart.

Mozart had the gift of beauty and grace; and those two qualities blended together produce that quality so hard to define and so easy to feel, — *charm. Mozart has charm.*

Whatever Mozart does, he, like Raphael, to whom he has been compared, is always beautiful. He is sunny and fresh and smiling, clear and delightful. His melodies, moreover, are like a never-failing spring, — they flow from an inexhaustible source.

Stendhal wrote in 1808:

"Like Raphael, Mozart embraced his art in its whole extent. Raphael appears to have been unacquainted with one thing only, — the mode of painting figures on a ceiling in contracted proportion, or what is termed foreshortening. As for Mozart, I am not aware of any department in which he has not excelled: operas, symphonies, songs, airs for dancing, — he is great in everything. The most remarkable circumstance in his music, independently of the genius displayed in it, is the novel way in which he employs the Orchestra, especially the wind instruments. He draws surprising effects from the flute, an instrument of which Cimarosa hardly ever

MOZART

*By Cignaroli*

made any use. He enriches the accompaniment with all the beauties of the finest symphonies."

What did Mozart do towards the development of our modern Orchestra? The question is easily answered. Mozart gave the Orchestra *tone-color.*

We have seen that Bach's Orchestra and Handel's Orchestra were both neutral in tint; or, if we prefer, black and white. The instruments all played their separate parts, but their individual *voices* had as yet hardly been discovered. It is true that Bach and Handel had written solo parts for various instruments, but, as a general thing, the melodies could be sung by one instrument as well as any other. But Mozart had very different ideas regarding instruments. To him a violin was a violin, a flute was a flute, a bassoon was a bassoon and a clarinet was a clarinet. Each instrument had to *speak for itself and with its own true voice,* or *tone-color.* Mozart originated what we may call an *orchestral palette.*

We have all seen a painter's palette, with the colors arranged in groups of reds and blues and greens, and so on, in their different gradations, or shades. Mozart's orchestral palette was arranged similarly, only instead of paints he grouped his instruments — his strings, his woodwind, his brass — as he pleased; and he mixed these tone-colors or conspicuously exhibited one of these splendid hues, keeping the others subordinate as an accompaniment.

We all know that light — perfectly white light — can be divided into the seven colors of the rainbow and that all the manifold and varied tints that we see in the world of nature — in sky and earth and

sea — in every flower and every fleeting hue that falls upon it — comes from those seven colors. Now Bach and Handel and all the other composers who lived before Mozart had never thought of music as anything but white, so to speak. It was Mozart who broke up this white light into its prismatic hues. It was Mozart who brought the new *beauty of color into music.*

Although Mozart learned much from Haydn, Haydn learned more from Mozart. When Haydn wrote his first *Symphony*, Mozart was three years old. Mozart died while Haydn was enjoying his London triumphs. Haydn's last *Symphonies* show the influence of Mozart, though Haydn never reached Mozart's glowing and brilliant color.

It is singular to remember that Mozart wrote his first Symphony only five years after Haydn wrote his first; but then Mozart was only eight years old! It was, however, a real symphony, in three movements and scored for the usual Orchestra of two violins, viola, bass (violoncello), two oboes and two horns.

Mozart had a very great advantage over Haydn in having heard so much music and so many different Orchestras. At this time there were a great many fine Orchestras in Europe and Mozart heard them all. Particularly notable was that of Mannheim, where Mozart first heard clarinets. "Oh, if we only had clarinets!" he wrote home in 1778. "You cannot think what a splendid effect a symphony makes with flutes, oboes and clarinets!"

The Mannheim Orchestra was generally considered the best in Europe, though some critics thought those of Munich and Vienna were better.

"The excellence of the Mannheim Orchestra — whose performances excuted as much admiration among contemporaries as those of the Paris Orchestra under Habeneck's conductorship at a later date — gained for it the honor of taking a regular share in the Elector's concerts. The Orchestra contained some of the first artists and *virtuosi* of the day, such as Cannabich, Toeschi, Cramer, Stamitz and Fränzel among the violins, Wendling as a flute-player, Le Brun and Ramm as oboists, Ritter as bassoonist and Lang as horn-player. But its fame rested chiefly on the excellent discipline of the Orchestra, which, among so many first-rate artists, it was no easy task to maintain. The *Kapellmeister* at the time of Mozart's visit was Christian Cannabich (1731–1798), who had succeeded Stamitz in 1775. His compositions were, doubtless, overrated by his contemporaries; but he was admirable as a solo violinist and still better as an orchestral leader, besides being an excellent teacher. The majority of the violinists in the Mannheim Orchestra had issued from his school and to this was mainly owing the uniformity of their execution and delivery. Cannabich, who was more of an organizer than an originator, had experimented with every condition and device for producing instrumental effects and he laid special stress on technical perfection of execution in order to be certain of having good ensemble players." [1]

Mozart had much to do in raising the standard of the Vienna Orchestra on his return home.

From this time forward the clarinet became conspicuous in Mozart's compositions.

[1] Jahn.

We get a glimpse of Mozart conducting in 1789 from Jahn. He was in Leipzig:

"At the rehearsal for this concert he took the *tempo* of the first *Allegro* of his symphony so fast that the Orchestra was very soon in hopeless confusion. Mozart stopped, told the players what was wrong and began again as fast as before, doing all he could to keep the Orchestra together and stamping the time with his foot so energetically that his steel shoe-buckle snapped in two. He laughed at this; and, as they still dragged, he began a third time. The musicians, now having become impatient, worked in desperation; and at last the movement went right. 'It was not caprice;' he explained afterwards to some musical friends, to whom he had been holding forth on the subject of too rapid *tempo*, 'but I saw at once that most of the players were advanced in years and there would have been no end to the dragging if I had not worked them up into a rage so that they did their best out of pure spite.' The rest of the symphony he took in moderate time; and after the song had been rehearsed he praised the accompaniment of the Orchestra and said it would be unnecessary to rehearse his concerto: 'The parts are correctly written out, you play accurately and so do I.' The result showed that his confidence was not misplaced."

Mozart is interesting to us in many periods; but we like best to think of him as the tiny prodigy, who was caressed and admired by all the world and who wrote the most delightful, childish letters home inquiring if "Master Canary still sang in G-sharp" and sending "A thousand kisses to Miss Bimberl"

(the dog). We like, too, the story of his first composition, as related by an eye-witness:

"Mozart's father, returning from church one day with a friend, found his son aged five, busy writing.

"'What are you doing there, my little boy?' he asked.

"'I am composing a concerto for the harpsichord, and have almost got to the end of the first part.'

"'Let me see your fine scrawl.'

"'No; I have not finished it yet.'

"The father, however, took the paper and showed his friend the sheet full of notes, which could hardly be deciphered for the blots of ink.

"The two friends at first laughed heartily at this scribbling; but after a little time when the father had looked at it with more attention, his eyes were fastened on the paper, and at length, overflowed with tears of joy and wonder.

"'Look, my friend,' he said, 'look. Everything is composed according to rule. It is a pity that the piece cannot be made any use of; but it is too difficult. Nobody would be able to play it.'

"'It is a concerto,' replied his little son, 'and must be studied until it can be played properly. This is the way it should be played.'"

This was the beginning of Mozart's composition. He wrote no less than six hundred and thirty-six works!

And to his name we will add this tribute:

"I have always been one of the greatest admirers of Mozart and I shall remain so until my last breath, — Beethoven."

When Mozart heard the boy Beethoven play during his first visit to Vienna in 1787 he said to his friends: "Pay attention to him he will make a noise in the world some day, or other."

It seems strange to find an English musician writing the following just appreciation of Beethoven in 1818, while the great genius was still living:

"Beethoven's genius seems to anticipate a future age. In one comprehensive view, he surveys all that science has hitherto produced, but regards it only as the basis of that superstructure which harmony is capable of raising. He measures the talents and resources of every preceding artist, and, as it were, collects into a focus their scattered rays. He discovers that Haydn and Mozart alone have followed nature, yet he explores the hidden treasures of harmony with a vigor superior to either. In sacred music he is pre-eminently great. The dark tone of his mind is in unison with that solemn style which the service of the church requires; and the gigantic harmony which he wields enables him to excite by sounds, a terror hitherto unknown."

Yes; Beethoven had a dark nature; or, at least, dark clouds frequently floated across his mind. He had everything to make him morose. His life was exceptionally unhappy: he had an unfortunate love-affair; the nephew in whom he placed all his hopes disappointed him; and, finally, he became totally deaf.

"His whole life is like a stormy day. At the beginning — a fresh, clear morning, perhaps a languid breeze, scarcely a breath of air. But there is always

in the still air a secret menace, a dark foreboding. Large shadows loom and pass; tragic rumblings; murmuring awesome silences — the furious gusts of the winds of the *Eroica* and the *C-minor*." [1]

Ludwig van Beethoven was of Flemish-Dutch origin as the "van" shows. He was, however, born in Bonn in 1770, his birthplace a bare attic. His father was a lazy tenor and his mother a servant. His childhood was most unhappy. Beethoven was marked for sorrow from his earliest years.

He was compelled to practise the violin and harpsichord by his good-for-nothing father, who made him earn his own living, and he soon lost his mother, whom he adored.

In 1787 he visited Vienna and had some lessons from Mozart. In 1788, when but seventeen, Beethoven was playing in the Orchestra of the Elector of Cologne at Bonn.

We get a good idea of what a fine German Orchestra was in 1791 from Charles Louis Junker, who described it in that year, and Beethoven, too, who was then twenty:

"The Elector remained a considerable time at Mergentheim and had some twenty of his band with him. I heard the most exquisite music and made the acquaintance of some first-rate artists.

"On the first day I heard the musical performance, which took place regularly while the Elector dined. There were two oboes, two clarinets, two flageolets, and two horns. These eight players may fairly be called masters in their art. Soon after the musical

[1] Romain Rolland.

performance during dinner the play began. It was *King Theodor*, with music by Paisiello.

"The Orchestra was capital, the *piani*, *forti* and *crescendi* being exceedingly well observed. Herr Ries, the expert score-reader and player at sight, conducted with the violin. He is worthy of being placed beside Cannabich.[1] His firm, vigorous lead inspires every player with life and spirit.

"The arrangement of the Orchestra was such as I had not seen elsewhere, but I thought it very convenient. Herr Ries stood on a raised platform in the middle of the theatre, and close to the stage where he could be seen by everyone. Immediately below and behind him were a counter violinist and violoncellist; on his right were the first violins, with the second violins opposite them; behind the violins the violas, with the clarinets opposite; behind the violas the counter violin and violoncello; and, last of all, the trumpets. On the conductor's left were the wind instruments; the oboes with the flageolets opposite and flutes and horns. It would be difficult to find an Orchestra where the violins and basses were so perfect.

"I also heard one of the greatest pianists — the dear, good Beethoven. I heard him improvise. In fact, I, myself, was asked to give him a theme. The greatness of this gentle man as a *virtuoso* may, I think, be estimated by the almost inexhaustible wealth of his imagination, the skill of his execution and the thorough originality of his expression. I did not find him deficient in any of the attributes of a great artist.

[1] In the Mannheim Orchestra (see page 210.)

In addition to his fluent execution he is suggestive, expressive, telling — in a word he touches the heart, and he is as good in *adagio* as in *allegro*. The clever artists of this Orchestra are his admirers one and all and listen intently when he plays. But he is modest and quite unassuming.

"The members of this band are, almost without exception in the prime of early manhood and well-educated. They have a splendid physique and, attired in the scarlet and gold uniform of the Prince, their appearance is very striking.

"We have perhaps been accustomed to regard the Electorate of Cologne as a dark land into which rays of enlightenment had never penetrated; but a visit to the Elector's Court would soon alter this opinion. I found the members of the Orchestra men of very liberal and sound understanding.

"The Elector, the most humane and best of princes, is not only a performer, but an enthusiastic lover of music. At the concert I went to he was the most attentive listener present."

Beethoven saw Haydn when the latter stopped in Bonn on his way to and from London. In 1792 Beethoven submitted a cantata to Haydn. Haydn praised it and encouraged Beethoven to go on with his studies. After a time the Elector sent Beethoven to Vienna, the main reason being that he should study with Haydn. One of his friends, on parting, advised him to "Labor assiduously and receive Mozart's spirit from the hands of Haydn."

Beethoven was then twenty-two. He never returned. Vienna was thenceforth his home.

Beethoven took lessons with Haydn for nearly two years and then went to another master, Albrechtsberger, a very strict contrapuntist, who took great pains with Beethoven but evidently did not think much of him, for he said to a friend: "Have nothing to do with Beethoven. He has learned nothing and will never do anything in decent style."

Among Beethoven's friends in Vienna were the Prince and Princess Lichnowsky, who had been patrons of Mozart. They supported a Quartet and an Orchestra and gave musical parties on a large scale. Their Friday evenings were famous.

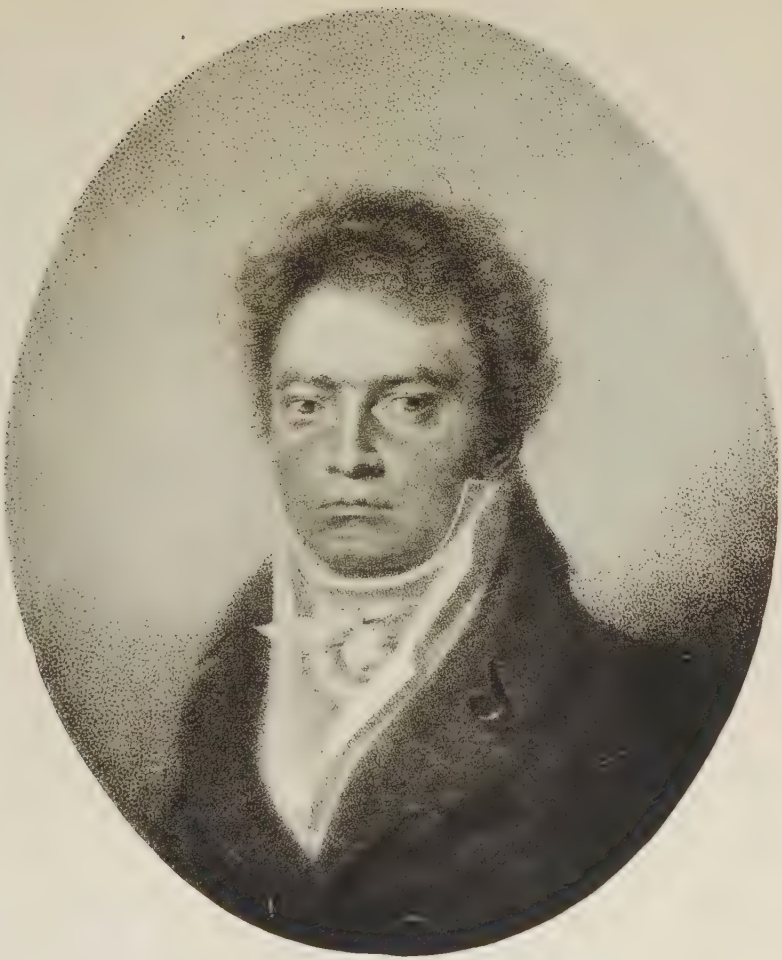
Music in Vienna was at that time chiefly dependent upon the patronage of the wealthy; for concerts were not paying and they were usually organized for some benevolent purpose.

The Lichnowskys offered Beethoven a home in their palace and a yearly allowance. For ten years, or more, it was at Prince Lichnowsky's house that almost all of Beethoven's works were first performed.

He was free to come and go as he pleased and had plenty of time to study and compose. Here he had a great deal of pleasure with the famous Quartet, first known as the Schuppanzigh and afterwards as the Rasoumoffsky.

Notwithstanding his uncouth ways and his passionate temper, Beethoven was a favorite in Vienna society. Haydn called him the Grand Mogul and considered him more of a pianist than a composer.

"His manner was often abrupt and even agressive. Perhaps he sometimes appeared so when nothing was further from his intention. A man with the *C-minor*



BEETHOVEN

*By Lebronne*

*Symphony* ringing in his head might well be excused some forgetfulness of the smaller conventions.

"Hitherto Beethoven's playing in Vienna had been restricted to the drawing-rooms of his personal friends. It was not till the year 1795 that the public whose curiosity must have been considerably excited by reports of the achievements of the young pianist from Bonn, had an opportunity of witnessing his powers. At the annual concert given at the Burg Theatre, for the benefit of the widows and orphans of musicians, the composer made his first public appearance. Salieri, as usual, conducted, and the programme included, besides an operetta composed by one of his pupils, a 'Pianoforte Concerto in C-major by L. van Beethoven.'

"On this, as on several other occasions, Beethoven caused something like a panic among his friends by postponing the completion of his composition till the last moment. Two days before the date of the performance the Concerto was still in an unfinished state; one cause of the delay being an attack of the colic, a malady to which the composer was subject. Wegeler was at hand to doctor him as well as he could; and while Beethoven, working at high pressure, filled sheet after sheet of music-paper, they were passed over to four copyists who attended in the next room. Next day at rehearsal a fresh *contre-temps* arose. There was found to be a difference of half a tone between the pitch of the pianoforte and that of the other instruments. To save a general retuning Beethoven seated himself at the piano without hesitation, and played the whole Concerto in

C-sharp — not an entirely unprecedented feat, but, nevertheless, one that gives an idea of his thorough mastery over technical difficulties." [1]

In 1796 Beethoven visited Dresden, Leipzig and Berlin.

In 1800 he left the Lichnowsky house and took lodgings for himself. Thenceforward he spent his summers in the country. He was now deaf.

In 1803 Beethoven gave an important concert in the Theater-an-der-Wien, the programme consisting of the oratorio *The Mount of Olives*, the Piano Concerto in C-minor and the Second Symphony, which was dedicated to Prince Lichnowsky. The final rehearsal took place at eight o'clock in the morning. "A terrible rehearsal," Ries [2] recorded, "and by half-past two everybody was tired out and more or less discontented. But the genial Lichnowsky, who was present from the beginning, had brought some huge baskets laden with meat, wine and bread-and-butter, and he was soon hard at work, pressing the good things upon each tired musician with both his friendly hands. After this all went well."

"We are told that Beethoven's attitude at the piano was perfectly quiet and dignified, with no approach to grimace except to bend down a little towards the keys as his deafness increased. This is remarkable because as a conductor his motions were most extravagant. At a *pianissimo* he would crouch down so as to be hidden by the desk, and then as the *crescendo* increased would gradually rise, beating all the time, until at the *fortissimo* he would spring

[1] Rudall. [2] Beethoven's pupil.

into the air with his arms extended as if wishing to float on the clouds. When, as was sometimes the case after he became deaf he lost his place and these motions did not coincide with the music, the effect was very unfortunate, though not so unfortunate as it would have been had he himself been aware of the mistake. In the Orchestra, as at the piano, he was urgent in demanding expression, exact attention to *piano* and *forte* and the slightest shades of *nuance* and to *tempo rubato.* Generally speaking, he was extremely courteous to the band, though there were now and then exceptions." [1]

"Beethoven was short and thick-set, broad shouldered and of athletic build. A big face, ruddy in complexion — except towards the end of his life, when his color became sickly and yellow, especially in the winter after he had been remaining indoors far from the fields. He had a massive and rugged forehead, extremely black and extraordinarily thick hair through which it seemed the comb had never passed, for it was always very rumpled, veritable bristling 'serpents of Medusa.' His eyes shone with prodigious force. It was one of the chief things one noticed on first encountering him, but many were mistaken in their color. When they shone out in dark splendor from a sad and tragic visage, they generally appeared black; but they were usually a bluish gray. Small and very deep set, they flashed fiercely in moments of passion or warmth, and dilated in a peculiar way under the influence of inspiration, reflecting his thoughts with a marvellous exactness. Often they inclined upwards

[1] Sir George Grove.

with a melancholy expression. His nose was short and broad with the nostrils of a lion; the mouth refined, with the lower lip somewhat prominent. He had very strong jaws, which would easily break nuts, and a large indentation in his chin imparted a curious irregularity to the face. 'He had a charming smile,' said Moscheles, 'and in conversation a manner often lovable and inviting confidence; on the other hand his laugh was most disagreeable, loud, discordant and strident' — the laugh of a man unused to happiness. His usual expression was one of melancholy. Rellstab in 1825 said that he had to summon up all his courage to prevent himself from breaking into tears when he looked into Beethoven's 'tender eyes with their speaking sadness.' Braun von Braunthal met him at an inn a year later. Beethoven was sitting in a corner with closed eyes, smoking a long pipe — a habit which grew on him more and more as he approached death. A friend spoke to him. He smiled sadly, drew from his pocket a little note-tablet, and in a thin voice which frequently sounded cracked notes, asked him to write down his request.

"His face would suddenly become transfigured, maybe in the access of sudden inspiration which seized him at random, even in the street, filling the passers-by with amazement, or it might be when great thoughts came to him suddenly when seated at the piano. The muscles of his face would stand out; his veins would swell; his wild eyes would become doubly terrible. His lips trembled, he had the manner of a wizard controlling the demons which he had invoked. A

Shakespearean visage — King Lear, so Sir Julius Benedict described it." [1]

Beethoven's compositions are far too numerous to mention here. We shall only speak of the *Symphonies.*

Beethoven's very first *Symphony* showed he was master of the Orchestra.

The Orchestra left by Mozart and Haydn consisted of the four stringed instruments, two flutes, two oboes, two bassoons, two horns, two trumpets, kettledrums and, occasionally, two clarinets. Neither Mozart nor Haydn ever used trombones in their *Symphonies.* Haydn had used as an exceptional matter in his *Military Symphony* a big drum, a triangle and cymbols.

The *First Symphony* is written for two drums (in C and G), two trumpets, two horns, two flutes, two oboes, two clarinets, two bassoons, first and second violins, violas and basso. There are one flute and one clarinet more than Mozart used in his *Jupiter Symphony.* One flute only is used in the *Andante.*

Beethoven also for the first time in the history of the Orchestra tuned the kettledrums in the key of the dominant instead of in the key of the movement.

In the *Second Symphony* the Orchestra is still the ordinary Haydn-Mozart Orchestra without trombones, but *with the addition of clarinets.*

In the *Eroica* (the *Third*) *Symphony* we find something new — *three horns.* It was, perhaps, the first appearance of three horns in the Orchestra. In passing, we may recall that in 1805 when Prince Lobkowitz was entertaining Prince Louis Ferdinand of

[1] Romain Rolland.

Prussia at his castle in Bohemia, to honor his guest, who was a remarkable musician and connoisseur, Lobkowitz ordered a performance of the new *Eroica*, by his Orchestra which always attended him. When the *Symphony* was finished Louis Ferdinand begged to have it repeated, and on the second performance begged to hear it again. "Certainly," replied Lobkowitz, "only we must first give the Orchestra some supper!"

In the *Fourth Symphony* only one flute is used. It is scored for two drums, two trumpets, two horns, one flute, two oboes, two clarinets, two bassoons, first and second violins, violas, violoncello and double-bass.

This *Symphony*, lovely as it is, was severely criticised. No one was more satrical than Weber, who was then a young man. He wrote a sketch in which he imagined himself as seeing in a dream all the instruments of the Orchestra grouped around the violins. The double-bass speaks: "I have just come from the rehearsal of a Symphony by one of our newest composers; and though, as you know, I have a tolerably strong constitution, I could only just hold out. Five minutes more would have shattered my frame and burst the sinews of my body. I have been made to caper about like a wild goat and to turn myself into a mere fiddle to execute the no-ideas of Mr. Composer. I'd sooner be a dancing master's kit at once."

The first violoncello (bathed in perspiration) says that for his part he is too tired to speak, and can recollect nothing like the warming he has just had since he played in Cherubini's last opera. The second violoncello is of the opinion that the *Symphony* is a

musical monstrosity, revolting alike to the nature of the instruments and the expression of thought and with no purpose but that of perpetually "showing-off." The conductor enters and threatens if they are not quiet to make them play the *Eroica Symphony;* and then he makes a speech, telling the instruments that the time has gone by for clearness and force, spirit and fancy, works like those of Gluck and Haydn and Mozart; and that here is the latest Vienna recipe for a *Symphony:* "First a slow movement full of short, disjointed, unconnected ideas, at the rate of three or four notes per quarter of an hour; then a mysterious roll of the drum and passage of the violas, seasoned with the proper quantity of pauses and *ritardandos;* and to end all a furious *finale,* in which the only requisite is that there should be no ideas for the hearer to make out, but plenty of transitions from one key to another — on to the new note at once, never mind modulating — above all things, throw rules to the winds, for they only hamper a genius."

"At this point," says Weber, "I woke in a dreadful fright. I was on the road to become either a great composer, or a lunatic."

The *Fifth Symphony* is scored for two drums, two trumpets, two horns, two flutes, one flute piccolo, two oboes, two clarinets, two bassoons, three trombones, first and second violins, violoncellos, basses and contra-fagotto (double-bassoon).

The piccolo, trombones and double-bassoon here make their first appearance in the symphonies. Beethoven had long known the double-bassoon, for there was one in the Orchestra of the Elector of Cologne.

The *C-minor Symphony* is of all Beethoven's works the most popular. It was the work that made him known to the whole world.

Berlioz tells an ancedote of how the *C-minor* impressed Lesueur, one of Berlioz's masters, at the Paris Conservatoire when it was first played in Paris. "After the performance," Berlioz says, "I hurried to see the effect the work had had upon him and to hear his judgment on it. I found him in the passage, red as fire and walking furiously fast. 'Well, my dear master,' said I —

"'Ouf!' was his reply, 'I must get out into the air. It is astonishing, wonderful. It has excited and overcome me so that in trying to put my hat on I could hardly find my head. Don't stop me now, but come to me to-morrow.'

"Early next morning I called on him and we at once rushed into the subject. At length I succeeded in making him repeat the confession of his emotion at the performance, but then with a violent shake of his head and a peculiar smile he said: 'All the same, such music as that ought not to be made.' To which I answered: 'All right, dear master, there's no fear of much being made like it.'"

The *Pastoral Symphony* (the *Sixth*) calls for two flutes, one piccolo, two oboes, two clarinets, two horns, two bassoons, two trumpets, two drums, alto and tenor trombones, first and second violins, viola, violoncellos and basses. The trumpets and trombones are used in the *Storm* only (fourth movement). In the *Andante* (second movement) there are two solo violoncellos (with *sordini*) the other violoncellos play with the double-basses.

The *Seventh Symphony* is composed for two flutes, two oboes, two clarinets, two bassoons, two horns, two trumpets, two drums, first and second violins, viola, violoncello and double-basses. The drums are tuned in E and A except in the *Scherzo*, where they are tuned in F and A.

This *Symphony* was first performed in the University of Vienna at a concert for the benefit of soldiers wounded at the Battle of Hanau (Oct. 30, 1813), where the Austrians and Bavarians tried to cut off Napoleon's retreat from Leipzig.

Beethoven conducted. Some of the most famous musicians and composers played in the Orchestra. There was Schuppanzigh, Romberg, Spohr, Mayseder and the famous double-bass, Dragonetti (see page 70); Meyerbeer and Hummel played the kettle-drums; Moscheles, the cymbals and old Salieri "gave time to the drums and salvos," says a contemporary, who continued:

"At this concert I first saw Beethoven conduct. Often as I had heard of it, it surprised me extremely. He was accustomed to convey the marks of expression to the Orchestra by the most peculiar motions of his body. Thus at a *sforzando* he tore his arms, which were before crossed on his breast, violently apart. At a *piano* he crouched down, bending lower the softer the tone. At the *crescendo* he raised himself by degrees until at the *forte* he sprang up to his full height; and without knowing it would often at the same time shout aloud."

The *Eighth Symphony* has two drums in F and C, two trumpets in F, two horns in F, two flutes, two

clarinets, two oboes, two bassoons, first and second violins, violas, violoncello and double-bass. In the Finale the drums are for the first time tuned in octaves. It was first performed in the Great Redoutensaal, Vienna, on Feb. 27, 1814. The Seventh Symphony was also on the programme and received the most applause.

There is a tremendous gap between the *Eighth* and the *Ninth Symphonies*. Even Beethoven, Titan that he was and with an orchestra that had developed marvellously under his magic hands, felt that instruments were not sufficient to express the ultimate climax of this mighty work, and, therefore, added human voices to swell the joyous uproar of the last movement. The *Ninth* was first performed at the Kärnthnerthor Theatre, Vienna, May 7, 1824. The house was crowded. All the principal musicians, professional and amateur, were present. "In a letter to Schindler, quoted by Lenz, he calls the day *Fracktag*, because he had the bore of putting on a smarter coat than usual. On this occasion it was a green coat, and he probably also wore a three-cornered cocked hat. The preparations had somewhat upset him, and his dress had to be discussed with Schindler in one of the conversation-books. His deafness had by this time become total, but that did not keep him out of the Orchestra. He stood by the side of Umlauf, the conductor, to indicate the times of the various movements. The house was tolerably full, though not crowded, and his reception was all that his warmest friends could desire. To use Schindler's expression it was more than Imperial. Three successive bursts of applause were the

rule for the Imperial Family and he had *five!* After the fifth, the Commissary of Police interfered and called for silence! Beethoven acknowledged the applause by a bow. The Scherzo was so completely interrupted — at the *Ritmo di tre battute*, where the drums give the motif — that it had to be begun again. A great deal of emotion was naturally enough visible in the Orchestra; and we hear of such eminent players as Mayseder and Böhm even weeping.

"At the close of the performance an incident occurred which must have brought the tears to many an eye in the room. The master, though placed in the midst of this confluence of music, heard nothing of it at all and was not even sensible of the applause of the audience at the end of his great work, but continued standing with his back to the audience and beating the time, till Fraulein Ungher, who had sung the contralto part, turned him, or induced him to turn round and face the people, who were still clapping their hands and giving way to the greatest demonstrations of pleasure. His turning round and the sudden conviction thereby forced on everybody that he had not done so before because he could not hear what was going on, acted like an electric shock on all present, and a volcanic explosion of sympathy and admiration followed, which was repeated again and again and it seemed as if it would never end." [1]

The score comprises two flutes, two oboes, two clarinets, two bassoons, four horns, two trumpets, two drums, first and second violins, violas, violoncellos and basses. In some of the movements three

[1] Sir George Grove.

trombones, a double bassoon, a piccolo, triangle, cymbals and big drum are called for.

"These great works he did as no one ever did and probably no one ever will. But of orchestral music he wrote no more after the *Ninth Symphony*. Music will advance in richness, scope and difficulty; but such music as Beethoven's great instrumental works, in which thought, emotion, melody and romance combine with extraordinary judgment and common sense and a truly wonderful industry to make a perfect whole, can hardly any more be written. The time for such an event, such a concurrence of the man and the circumstances will not again arrive. There can never be a second Beethoven, or a second Shakespeare. However much Orchestras may improve and execution increase, Beethoven's *Symphonies* will always remain at the head of music as Shakespeare's plays are at the head of the literature of the modern world — 'Age cannot wither them, nor custom stale their infinite variety.'"[1]

In every way possible Beethoven discovered and brought forward the capacities of each individual instrument. Each instrument in the Orchestra was enriched under Beethoven's touch and given a new standing, a new dignity. The viola, the violoncello, the double-bass, the horn, the trombone and the kettledrum were all brought forward and turned into solo instruments. The clarinet, too, became firmly established as a leading voice.

No composer before him had ever *made the instruments converse* as did Beethoven. No composer had

[1] Sir George Grove.

ever made the strings so flexible, so humorous, so pathetic, so gay, so languorous. Besides, Beethoven was the first to take the violins up into the highest register — into the ethereal domain where Wagner followed.

"When an idea comes to me," said Beethoven, "I hear it on an instrument, never on a voice."

"Beethoven is the prophet of the new era which the Nineteenth Century ushered in for mankind. As things must be *felt* before they can be acted out, so they must be expressed in the indefinite emotional forms of music before they can be uttered and definitely imaged forth in words or pictorial shapes. Beethoven is the forerunner of Shelley and Whitman among the poets, of J. W. Turner and J. F. Millet among the painters. He is the great poet who holds Nature by the one hand and Man by the other. Within that low-statured, rudely outlined figure which a century ago walked hatless through the fields near Mödling or sat oblivious in some shabby restaurant at Vienna, dwelt an emotional giant — a being who — through his outer life by deafness, disease, business-worries, poverty, was shattered as it were into a thousand squalid fragments — in his great heart embraced all mankind, with piercing insight penetrated intellectually through all falsehoods to the truth and already in his art-work gave outline to the religious, the human, the democratic yearnings, the loves, the comradeship, the daring individualities, and all the heights and depths of feeling of a new dawning era of society. He was, in fact, and he gave utterance to, a new type of man. What that struggle must have

been between his inner and outer conditions — of his real self with the lonely and mean surroundings in which it was embodied — we only know through his music." [1]

Beethoven was the last great Classical composer. With Weber we enter a new school of music — the Romantic; and Carl Maria von Weber stands at the head of this Romantic School.

The word *Classical* is used in two ways: one, to define old works which have held their place in general estimation for a long time; and the other to describe works, written according to strict ideas of form, usually in the Sonata and Symphonic style. The great classical masters are Bach, Handel, Haydn, Mozart and Beethoven. The word *Romantic* is used to define the works of the composers who came directly after the Classical composers and who wished to write in freer form, permitting more play for the imagination.

The great Romantics are Weber, Schubert, Mendelssohn, Schumann and Chopin.

"Widely as the composers of this new school differed in other respects, they were alike in their susceptibility to the tone of thought and feeling which so deeply colored the romantic literature of their time. None of them were strangers to that weariness, approaching to disgust, of the actual world around them and those yearnings to escape from it which pursued so many of the finest minds of the generation to which they belonged. To such men it was a relief and delight to live in an ideal world as remote as possible from the real one.

[1] Edward Carpenter.

C. M. VON WEBER

*By Schimon*

"Some took refuge in mediæval legends, where no border divided the natural from the supernatural one; some, in the charms and solitudes of nature; and others in the contemplation of peace and beatitude beyond the grave." [1]

Of all the German musicians of the Nineteenth Century none exercised a greater influence than Weber. "The historian of German music in the Nineteenth Century will have to make Weber his starting-point. His influence was even greater than that of Beethoven, for deeply imbued though Beethoven was with the modern spirit of that time, he adhered as a rule to the traditions of the Eighteenth Century. These Weber casts aside and starts after fresh ideals. He was far less perfect in form than Beethoven, nor was he his equal in power; but in originality he has never been surpassed by any musician, ancient or modern. The germs of life he scattered broadcast; and the whole of German Opera down to Wagner's latest works is evolved from Weber's spirit. Even the concert-music of other masters such as Mendelssohn and Schumann profited by his suggestiveness. Without Weber Mendelssohn's *Midsummer Night's Dream Music, Walpurgis Nacht, Concert-Overtures* and *Pianoforte Concertos;* Schumann's *Paradise and the Peri, Pilgrimage of the Rose* and concert-ballads; the entire variation music of the present day; choruses for men's voices; certain forms of the German *Lied;* even the modern technique of pianoforte playing; and, most of all, the *present development of orchestration are inconceivable.*" [2]

Weber, like Bach, came of a musical family; but,

[1] A. W. Wodehouse. [2] Dr. Philipp Spitta.

unlike most of the great composers who had, heretofore appeared, Weber was of noble ancestry.

Weber was a cultivated man of the world as well as a musician. His birth gave him a place in the best society and his cultivation, which was learned from men rather than books — he lived a wandering life in his youth — was wide and embraced literature and several arts.

Carl Maria von Weber was born in Vienna in 1786. He was a delicate, nervous child whose health was not improved by his father's desire to make him a musical prodigy like Mozart, of whom he was a cousin. Weber was sadly overtaxed. Among his masters were Michael Haydn, brother of the great Haydn, and the Abbé Vogler, a fashionable composer and organist of Vienna and a man of wit, culture and social position. By 1810, when his true musical life may be said to begin, Weber had brought out several operas. In Mannheim he produced his first *Symphony*. In 1811 he started on his tour through Germany and Switzerland, at first alone and then in company with Baermann, the celebrated clarinet-player. Weber's visit to Berlin in 1812 was very important. After many concert-tours Weber became conductor of the theatre in Prague. In 1816 the King of Saxony called him to Dresden.

It is interesting to catch a glimpse of Weber on his first appearance as *Kapellmeister* here, as related by his son:

"After a few words of pleasant and friendly greeting and assurances of his goodwill and interest to all, he terminated with the astounding declaration: 'In

return I expect explicit obedience. I shall be just but pitilessly severe with all who need severity, myself among the number.' Such expressions had never before been heard by any of the company. For many generations gentle wishes, not commands, had been the order of the day. At first all stood aghast and dumb. On leaving the theatre at least two-thirds of the company declared themselves against the 'impertinent young musical director.' The members of the Orchestra were all indignant. Never had the most celebrated of *kapellmeisters* ever dared to address this celebrated Orchestra. And yet, in a short time, some of the bitterest enemies of this hour became Weber's staunchest friends, supporters and admirers.

"There are still living many old members of the Dresden Orchestra who can remember the appearance of Weber on this memorable occasion. He stood before them a little, narrow-chested man, with long arms and a thin, pale face, from which his eyes gleamed forth in lightning flashes through his spectacles. When he was pleased a smile, which was positively enchanting, played over his otherwise serious mouth. When affected by the occurrences of the moment, he bent his head gently sideways with an air of peculiar tenderness and earnestness. He wore a blue frock coat with metal buttons, tight pantaloons and Hessian boots with tassels. A scrupulously clean white cravat with embroidered ends, in which was stuck a handsome diamond pin, encircled his neck. Over all he carried a tawny colored cloak with several capes, a broad round hat on his head. Nothing in his whole attire indicated any artistic pretension or affectation; and,

in the streets, or in a room, he might have been easily overlooked. Once noticed, however, Weber was sure to charm and captivate by his air of intellectual refinement and elegance of manner."

*Der Freischütz* was performed in Berlin in 1821; *Euryanthe* in Vienna in 1823; and *Oberon* in London in 1826, the year of Weber's death.

Though Weber's works for the Orchestra are comparatively unimportant, the instrumentation of his operas, so dramatic, so original and so poetic, has had great effect on modern orchestral writers.

Weber's instrumentation was founded on Beethoven's. He introduced no new instruments. What he did *was to develop the woodwind* and *make new and lovely combinations*. For the clarinet he had a special fondness.

After Mozart introduced the clarinet into the Orchestra, it rapidly became a favorite solo-instrument. At the beginning of the Nineteenth Century Germany had two splendid clarinet-players, — Hermstedt of Sondershausen, for whom Spohr composed, and Baermann of Munich, with whom Weber gave concerts, as we have seen,[1] and wrote special music. Weber learned much from the latter about the resources of this instrument; and Weber is the composer, *par excellence*, of the clarinet.

Next to the clarinet, Weber loved the horns. He made them most poetic. With Beethoven four horns and three trombones had been exceptional. With Weber this number became the rule.

Weber was also fond of subdividing the violins.

[1] See page 234.

"As an interpreter of nature Weber's position in the dramatic world is like that of Beethoven in the Symphony. Nobody has ever depicted with the same truth as he a sultry moonlight night the stillness broken only by the nightingale's trill and the solemn murmur of the trees, as in Agathe's grand *scene* in *Der Freischütz;* or a gruesome night scene in the gloomy forest ravine such as that in the Finale of the 2d Act. With this descriptive faculty went hand in hand consummate skill in orchestration. There is something original and intoxicating in the sound he brings out of the Orchestra, a complete simplicity combined with perfect novelty. He was able, as it were, to *transport himself into the soul of the instruments* and make them talk to us like human beings, each in its own laguage, each speaking when it alone has power to lay bare the very heart of the action.

"The phrase 'local coloring' in music may be defined as that which conjures up before our minds the associations connected with certain scenes, races and epochs. In the *Freischütz* the prevailing color was derived from the life of the German foresters and huntsmen; in *Preciosa* we have the charm of the south in lovely Spain, then the type of all that was romantic, with the picturesque life of the roving gipsy. *Euryanthe* takes us back to the Middle Ages and the palmy days of French chivalry which reappear to some extent in *Oberon* mingled with scenes from Oriental life and from fairyland. Weber's melody, the chords of his harmony, the figures employed, the effects of color so totally unexpected — all combine

to waft us with mysterious power into an unknown land." [1]

Schubert's gift to the Orchestra was his *novel way of writing for the trombones and for his use of the wood-wind.* He gave a conversational treatment of oboe, flute and clarinet. This does not mean to say that he did not also write beautifully for the strings.

No composer ever lived more entirely in his music than Schubert. There is not much to say about his life. He was born in Vienna; he lived there all his life; and he died there at the age of thirty-one. He earned a scanty living; he found it hard to get his compositions published; he had no wealthy patrons like Handel, Haydn, Gluck, Mozart and Beethoven; he had no pleasures, no triumphs such as Weber and Mendelssohn enjoyed. Schubert's life was dull and commonplace. Yet between the years of his birth and death — 1797–1828 — he produced an astounding number of works. He wrote 650 songs (the extraordinary *Erl-King* when he was only eighteen), ten *Symphonies* (of which the eighth is the *Unfinished*), many operettas, piano-music and a great deal of orchestral and chamber-music and compositions for special instruments.

Salieri, the old rival of Mozart, was the first to recognize Schubert's genius. "He can do everything," he exclaimed, "he is a genius. He composes songs, masses, operas, quartets — whatever you can think of." In 1822 Schubert met both Beethoven and Weber. Beethoven he adored. Schubert was a singer, violinist and pianist.

[1] Dr. Phillipp Spitta.

SCHUBERT

*By Rieder*

Schubert's first *Symphony in D* is dated 1813; the *Second in B-flat* is dated 1814; the *Third in D*, in 1815; the *Fourth in C-minor* (described by the composer as "the Tragic") is dated 1816; and scored for two violins, viola, violoncello and bass, two flutes, two oboes, two clarinets, two bassoons, four horns, two trumpets and drums.

The *Fifth Symphony*, known as the "Symphony without trumpets and drums," is scored for two violins, viola, violoncello, double-bass, flute, two oboes, two bassoons and two horns. It is dated 1816. Up to this point Schubert's *Symphonies* show the influence of Haydn, Mozart and Beethoven. Now came the true Schubert style with the *Sixth, the C-major Symphony*, which is regarded as Schubert's masterpiece. It is scored for two violins, viola, violoncello and double-bass; two flutes, two oboes, two clarinets, two bassoons, two horns, two trumpets, and drums. This work was first performed in Vienna in 1828, but it was not heard in Paris and London until 1856. In 1842 Habeneck rehearsed it in Paris, but the Orchestra refused to play it; and when Mendelssohn put it into rehearsal in London the Philharmonic Orchestra laughed at the triplets in the last movement, and Mendelssohn, very indignant, withdrew it. Sir Augustus Manns, who introduced the work in England in 1856, remembers hearing at the end of the first movement the principal horn call out to one of the first violins: "Tom, have you been able to discover a tune yet?" "I have not," was Tom's reply.

The *B-minor*, the *Unfinished*, was written in 1822, before the *C-major*. The *Unfinished* we may note,

was composed before Beethoven's *Ninth* and the *C-major Symphony* after it.

Perhaps Mendelssohn's most characteristic orchestral work is to be found in the *Midsummer Night's Dream* music, the oratorio of *Elijah* and the Overture to *Melusine*. Of course, his Symphonies — the *Reformation*, which appeared in 1830, two years after Schubert's *C-major*, the *Italian* in 1831 and the *Scotch* in 1842, contain beautiful work especially for the woodwind.

With his suave, graceful, sunny and charming melodies, it was only natural that Mendelssohn's instrumentation should be delicate.

In the world of pictures we often turn from the deep, rich colors of Titian, Rembrandt and Velasquez to enjoy the softer hues of Chardin, Watteau and Fragonard. It is the same in music. Refreshing it is to turn from the dark, heavy colors of Beethoven, or the glowing hues of Weber and Wagner to the opalescent tints of delightful, fanciful, poetic Mendelssohn.

Mendelssohn's life was happy from beginning to end; and this joy bubbles up in his music. The world gave him much; and he gave the world much in return.

Born in Hamburg in 1809, he spent his early years in Berlin, where his family removed. He had a childhood almost unparalleled in the annals of music for happiness. He conducted a little Orchestra in his father's house every Sunday morning, where many of his early compositions were performed, among them the Overture to the *Midsummer Night's Dream*, which he wrote when he was only seventeen. As pianist,

organist, conductor and composer, Mendelssohn had one triumph after another. He made nine visits to London, where he stood next to Handel in popular affection.

In 1835 he became conductor of the Gewandhaus concerts in Leipzig and he established the Conservatory of Music in that city. He died in Leipzig in 1847.

Mendelssohn has suffered somewhat from the high position the English have given him in music; but he has a place that is quite his own. He followed in the footsteps of Weber rather than in those of Beethoven; and, though he has no tragic depths, he has given the world lyric compositions of great beauty and the greatest oratorios since Handel's.

Mendelssohn sketched and painted well; he had a love for literature; he wrote charming letters; and he was altogether a delightful person.

Mendelssohn's orchestration is noted for *its perfect balance, its clarity and its polish.* He seems to have cared less for the brass than the other groups. His violin concerto, ranking next to Beethoven's, shows his sympathy for the violin. The viola is also well treated in all his works. The violoncello *obbligato* in the accompaniment to the solo "It is enough" in *Elijah* proves that this instrument was a favorite. The clarinet passages in the *Overture to Melusine* and the use of the horns in the *Notturno* in *A Midsummer Night's Dream* exhibit his poetic and romantic touch in the highest degree.

Many persons have left snap-shots of happy Mendelssohn, Sir Julius Benedict, a pupil of his, wrote enthusiastically: "It would be a matter of difficulty

to decide in what quality Mendelssohn excelled the most, — whether as composer, pianist, organist, or conductor of an Orchestra. Nobody, certainly, ever knew better how to communicate — as if by an electric fluid — his own conception of a work to a large body of performers. It was highly interesting, on such an occasion, to contemplate the anxious attention manifested by a body of sometimes more than five hundred singers and performers, watching every glance of Mendelssohn's eye and following, like obedient spirits, the magic wand of this musical Prospero. Once, while conducting a rehearsal of Beethoven's *Eighth Symphony*, the admirable Allegretto in B-flat, not going at first to his liking, he remarked, smilingly that he knew every one of the gentlemen engaged was capable of performing and even composing a scherzo of his own, but that *just now* he wanted to hear Beethoven's, which he thought had some merits. It was cheerfully repeated. 'Beautiful! Charming!' cried Mendelssohn, 'but still too loud in two or three instances. Let us take it again from the middle.' 'No, no,' was the general reply of the band, 'the whole piece over again, for our satisfaction;' and then they played it with the utmost delicacy and finish, Mendelssohn laying aside his *bâton* and listening with evident delight to the perfect execution. 'What would I have given,' he exclaimed, 'if Beethoven could have heard his own composition so well understood and so magnificently performed.'"

Another admirer wrote: "When once his fine, firm hand grasped the *bâton*, the electric fire of Mendelssohn's nature seemed to stream out through it and

MENDELSSOHN

*By Bendemann*

be felt at once by singers, orchestra and audience. Mendelssohn conducted not only with his *bâton*, but with his whole body. At the outset, when he took his place at the music-stand, his countenance was wrapped in deep and almost solemn earnestness. You could see at a glance that the temple of music was a holy place to him. As soon as he had given the first beat, his face lighted up, every feature was aflame and the play of countenance was the best commentary on the piece. Often the spectator could anticipate from his face what was to come. The *fortes* and *crescendos* he accompanied with an energetic play of features and the most forcible action; while the *decrescendos* and *pianos* he used to modulate with a motion of both hands till they slowly sank to almost perfect silence. He glanced at the most distant performers when they should strike in, and often designated the instant when they should pause, by a characteristic movement of the hand, which will not be forgotten by those who ever saw it."

Contemporary with Mendelssohn, though they seem much nearer to us than he, are three great geniuses of the Nineteenth Century, — Berlioz, Liszt and Wagner. Though all three were admirers of the Classic masters, they formed an entirely new school of music, which was called "The Music of the Future."

It is hard to say to which of these men Music owes the most; for while Wagner was certainly the greatest composer, Berlioz daringly led the way into these new regions where Wagner followed, and Liszt, with his extraordinary influence, his generosity of spirit, his untiring zeal in producing Wagner's works as well

as his lavish gifts to Wagner in times of trouble, was not the least important of the three in making Music what it is to-day. Moreover, Liszt's own compositions helped to establish in the affections of the public this Music of the Future that became the Music of the Present and that is rapidly taking its place in the Music of the Past ranking as Classic in the first meaning of the word (see page 232).

To understand how Music departed from the old roads and took a new path, we must remember that in 1830 with the Revolution that sent Charles IX from the French throne, a new spirit came into the world of literature, art and music. It is known as the Romantic Movement. Writers and painters, full of the excitement of the period and joy at the triumph of republican ideas, sought to portray nature and human nature in truer lines and colors than the traditional rules and measurements of the Classic period.

There was a great outburst of literature in France — Gautier, Flaubert, de Musset, de Vigny and Victor Hugo are a few of the names that rise to one's lips when the Romantic Movement is mentioned. Painters, too, were numerous. There was but one French composer — Berlioz. Just what Victor Hugo expressed in literature, just what Delacroix expressed in painting, Berlioz expressed in music; and Berlioz stands alone, a solitary figure.

"Berlioz's early influences were as much literary as musical. His reading was mainly romantic; his musical gods were Beethoven, Weber and Gluck, whose orchestral writings influenced him most. He knew little of Beethoven's piano writings and did not

like Bach. Into the intellectual world of the Beethoven symphony and the operas of Gluck and Weber, he breathed the newer, more nervous life of the French Romanticists. *Color and sensation* became as important as form and the pure idea. These influences and his literary instincts led him to graft the programme form on the older symphony. All his music aims at something concrete. Instead of the abstract world of the classical symphonists he gives us definite emotions, or paints definite scenes. His own words: 'I have taken up music where Beethoven left it' indicate his position. He is the real beginner of that interpenetration of music and the poetic idea which has transformed modern art." [1]

Berlioz's temperament was like a volcano bursting continually into fire and flame and his mind took delight in everything of enormous magnitude. He loved to think of the Pyramids of Egypt, of huge lonely mountanis, of great seas, the bursting of thunderbolts and the howl of tempests. Everything with him appeared in colossal proportions; and, consequently, much of his music seemed to the people of his time, even more than to us to-day, to have been written for the ears of giants and Titans and not for men and women of ordinary build.

Heine appreciated this phase of the extravagant Berlioz. "A colossal nightingale, a lark the size of an eagle," he wrote of him, "such as once existed in the primæval world. Yes, the music of Berlioz, in general seems to me primitive almost antediluvian; it sets me dreaming of gigantic species of extinct animals, of

[1] Ernest Newman.

mammoths, of fabulous empires with fabulous sins, of all kinds of impossibilites piled one on top of the other. These magic accents recall to us Babylon, the hanging-gardens of Semiramis, the marvels of Nineveh, the audacious edifices of Mizraim such as are shown in the pictures of the English painter Martin."

This is all true, but it represents only one side of Berlioz.

Berlioz could be exquisite and dainty as well as colossal and terrific, as we hear in the *Queen Mab Scherzo* from the *Roméo et Juliette Symphony*, and the *Dance of the Sylphs* from the *Damnation of Faust*.

Berlioz is called the "Father of Modern Orchestration." To appreciate the magnitude of his work, we must forget all our modern music for a moment and remember what the Orchestra was like when Berlioz, a country boy of eighteen, arrived in Paris in 1821.

Berlioz "is one of the most remarkable phenomena in the history of music. In his earliest years, as in his latest, Berlioz was himself, a solitary figure, owing practically nothing to other people's music, an artist we may say, without ancestry and without posterity. Mozart builds upon Haydn and influences Beethoven; Beethoven imitates Mozart and in turn influences the practice of all later symphonists; Wagner learns from Weber and gives birth to a host of imitators. But with Berlioz — and it is a point to be insisted on — there is no one whose speech he tried to copy in his early years and there is no one since who speaks with *his* voice. How many things in the early Beethoven were made in the factory of Mozart! How many times does the early Wagner speak with the voice of Weber! But who can

En voyant de quelle façon certains gens entendent l'amour, et ce qu'ils cherchent dans la création de l'art, je pense toujours involontairement aux porcs, qui, de leur ignoble groin, fouillent la terre au milieu des plus belles fleurs et aux pieds des grands chênes, dans l'espoir d'y trouver les truffes dont ils sont friands.

(Dernières lignes des Mémoires) Hector Berlioz

BERLIOZ

*By Fischer*

turn over the scores of Berlioz's early works and find a single phrase that can be fathered upon any previous, or contemporary, writer? There was never any one, before his time or since, who thought and wrote just like him; his musical style especially is absolutely his own. Now and then in *L'Enfance du Christ* he suggests Gluck — not in the turn of his phrases but in the general atmosphere of an aria; but apart from this it is the rarest thing for him to remind us of any other composer. His melody, his harmony, his rhythm, are absolutely his own." [1]

In nothing did the originality of Berlioz show itself more strikingly than in his treatment of the Orchestra.

So many of his ideas and effects were used, and carried still further, by Wagner that some of the richness and beauty of tone of the modern Orchestra that we usually give to Wagner belongs rightfully to Hector Berlioz. For instance, Berlioz discovered the value of *pianissimo* brass effects; he discovered the ethereal charm of harmonies on divided violins; he discovered the true worth of the viola; he introduced the harp into the Symphony Orchestra; he grouped instruments into families and got from them rich chords in different shades of the same tone-color; he advocated the tuba as a substitution for the coarser opheicleide; he made many experiments with the kettledrums and other instruments of percussion; he divided the strings into many parts (one of his scores calls for five double-basses); and he also advocated the sunken and hidden Orchestra, which Wagner realized in his theatre of Bayreuth.

[1] Ernest Newman.

Wagner frankly confesses his debt to this French genius. "Berlioz was diabolically clever," he wrote: "I made a minute study of his instrumentation as early as 1840 in Paris and I have often taken up his scores since. I profited greatly both as regards what to do and what to leave undone."

It is absurd to say that without Berlioz there would have been no Wagner; but it is no exaggeration to say that without Berlioz there might have been a Wagner very different from the one we know.

"Berlioz's startling originality as a musician rests upon a physical and mental organization very different from, and in some respects superior to, that of other eminent masters, — a most ardent nervous temperament; a gorgeous imagination, incessantly active, heated at times to the verge of insanity; an abnormally subtle and acute sense of hearing; the keenest intellect, of a disserting analyzing turn; the most violent will, manifesting itself in a spirit of enterprise and daring equalled only by its tenacity of purpose and indefatigable perseverance.

"From a technical point of view certain of Berlioz's attainments are phenomenal. The gigantic proportions, the grandiose style, the imposing weight of those long and broad harmonic and rhythmical progressions towards some end afar off, the exceptional means employed for exceptional ends — in a word, the colossal cyclopean aspect of certain movements are without parallel in musical art.

"The originality and inexhaustible variety of rhythms and the surpassing perfection of his instrumentation are points willingly conceded by Berlioz's

staunchest opponents. As far as the technique of instrumentation is concerned, it may truly be asserted that he treats the Orchestra with the same supreme daring and absolute mastery with which Paganini treated the violin and Liszt the pianoforte. No one before him had so clearly realized the individuality of each particular instrument, its resources and capabilities. In his works the equation between a particular phrase and a particular instrument is invariably perfect; and over and above this, his experiments in orchestral color, his combination of single instruments with others so as to form groups, and again his combination of several separate groups of instruments with one another are as novel and as beautiful as they are uniformly successful." [1]

Berlioz wrote a *Treatise on Instrumentation*, which he curiously numbered among his works as opus 10.

Hector Berlioz was born in La Cote Saint-André, near Grenoble, in 1803, and died in Paris in 1869. His father, Dr. Louis Berlioz, wanted him to be a physician and sent him to Paris at the age of eighteen to study medicine. But medicine was against his will, and it was not long before Berlioz abandoned these studies and entered the Paris Conservatory as a pupil of Lesueur. Soon his parents stopped his allowance; and the young man was forced to earn his living by singing in the chorus of an obscure theatre. He was not popular in the Conservatory: his character and his genius were too original. However, in 1830 he obtained the *prix de Rome*, that envied purse enabling the winner to study in Italy. On returning to Paris,

[1] Edward Dannreuther.

he earned his living by his pen — he was a brilliant journalist — and gave concerts of his works as he finished their composition.

His monster concerts and the huge Orchestra he required were subject to ridicule and caricature. The comic papers were full of illustrated jokes at his expense.

"I am so sorry to hear that your husband has become deaf. How did it happen?" one sympathetic lady says to a friend, who replies, "Well, you see he *would* go to that last concert of Berlioz!'"

Another picture shows two street venders looking at one of their tribe flaunting a rich dress. "How did she become so rich?" one asks the other; and the latter explains: "Why, she sells cotton at the door of Berlioz's concerts for people to stuff in their ears!"

Berlioz's symphony *Harold in Italy*, written in 1834, at Paganini's request for a solo part in which he could exhibit his fine Stradivari viola, attracted some attention when it was performed at the Conservatory. His dramatic symphony *Roméo et Juliette*, performed at the Conservatory in 1839, won him fresh laurels. It was dedicated to Paganini, who having heard the *Fantastic Symphony* and *Harold in Italy* given under Berlioz's direction at a concert in Paris in 1838, dropped on his knees before the composer, kissed his hand and the next day sent him a cheque for twenty thousand francs ($4,000). Berlioz spent much time polishing this score; and of all his compositions he preferred the *Adagio* (love scene) of *Roméo et Juliette Symphony*.

Berlioz's life was comparatively uneventful. His

operas, *Benvenuto Cellini* and *Béatrice et Bénédict* (*Much Ado about Nothing*) and his two works on the Trojan War were unsuccessful. His gigantic works such as the *Damnation of Faust* and *Requiem* were also failures. His success was gained outside of his beloved Paris in 1843 and 1847, when he gave concerts in Germany and Russia. His extraordinary reception amazed his own countrymen, with whom Berlioz was never popular.

In 1852 he became Librarian at the Paris Conservatory. France gave him the cross of the Legion of Honor and other countries bestowed decorations upon him.

"Liszt was at first a pianist, the most extraordinary and fascinating ever known, and one of the most wonderful of improvisators. Yielding to the taste of the time, he composed *Fantasias*, arrangements, or paraphrases, upon fashionable operas, bristling with difficulties of execution so extreme that no one but himself could attempt to play them.

"It was not until a later period that he began really to compose and then he brought into his work the quality of mysticism which was in his own nature." [1]

Franz Liszt (1811–1886), is another phenomenon in musical history. He was great as a pianist, great as a composer, great as a conductor, great as a man, great as a friend. In looking over his life it seems incredible that any man could have accomplished so much and in so many varied directions.

All the good fairies of fortune presided over his career from his earliest hours. He was born at Raiding

[1] Lavignac.

in Hungary, in 1811, the son of Adam Liszt, an official in the Imperial service of Prince Nicholaus Esterhazy (the patron of Haydn) and amateur musician, who taught his son so well that at the age of nine years he appeared at a concert in Œdenburg. Soon afterwards several Hungarian noblemen subscribed a sum to provide for his education for six years. Young Franz studied with Czerny and Salieri (Mozart's rival) in Vienna and in 1823 played before Beethoven, who embraced him on the stage. In that year "the little Liszt" was taken to Paris by his father and there he had the best instruction. After the death of his father in 1827, he supported himself and his mother in Paris, by teaching and giving concerts.

He lived in Paris in the early days of the Romantic Movement[1] and was brought into relation with all the great artists, writers, poets and musicians of the day. Paganini's magical playing inspired in him the ambition to do for the pianoforte what Paganini had done for the violin. How well he accomplished his desire we all know.

For many years Liszt travelled through Europe giving concerts everywhere and always with phenomenal success. His concert-tours, which extended from Spain and England to Russia and Hungary, were really triumphal progresses. Much of his money he gave away — sometimes to relieve suffering brought about by some great calamity, sometimes to help needy brother artists, sometimes for the cause of music, particularly for "the Music of the Future."

In 1849 his career as a virtuoso-pianist practically

[1] See page 244.

LISZT IN 1875

*Photograph taken in Budapest*

came to an end and he settled in Weimar. He soon made this town the centre of a brilliant artistic life.

Professional and amateur musicians flocked there to study under the generous master who gave instruction to talented pupils without remuneration. Others came to hear rare and new works performed under his *bâton* at the Court Theatre of which he was conductor. His splendid interpretations of *Lohengrin* and *Tannhäuser* contributed no little in establishing Wagner's reputation at a time when he greatly needed such endorsement as Liszt was able to give.

In 1861 Liszt left Weimar and went to Rome, where he took minor orders in 1865. Subsequently he was known as the Abbé Liszt.

The last years of his life were divided between Rome, Weimar and Buda-Pesth, an active and influential force in musical art until his sudden death at Bayreuth in 1886.

"There are two great paradoxes in the career of Liszt. The first is that just as Rossini, the most popular opera composer of his day, ceased writing operas thirty-nine years before his death, so Liszt, the greatest and most adored pianist of all times, ceased playing in public (except for an occasional charitable purpose) about the same number of years before his end came. He had with his inimitable art familiarized concert-goers with nearly all the best compositions for the piano created by other masters. He had transcribed for the same instrument a large number of songs, operatic melodies and orchestral works (the number of these transcriptions at his death was 371) thereby vastly increasing their vogue. He also

wrote altogether 160 original compositions for the pianoforte, many of them as new in *form* as in *substance;* unique among them being the fifteen *Hungarian Rhapsodies* — collections of Magyar melodies with gipsy ornaments molded by him into works of art, after the manner of epic poets. But — and here lies the second paradox — Liszt, the greatest of all pianists was not satisfied with the piano. In many of his pieces for it he endeavored to impart orchestral power and variety of tonal effect; and finally, when he became conductor at Weimar, in 1849, he transferred his attention chiefly to the Orchestra. Of his thirty-four orchestral works the most important are the *Faust* and *Dante Symphonies* and thirteen *Symphonic Poems,* in which he deviated from the old symphonic form in a spirit similar to Wagner's operatic reforms — abolishing unconnected movements and allowing the underlying poetic idea to shape the form of the music.[1]

Liszt linked himself with Berlioz when he heard the *Symphonie fantastique.* He took up the cause of Berlioz and became his champion. But independently of Berlioz, Liszt was imbued with the Romantic Movement of 1830. To such a genius and man of the world who came in contact with all the great intellects of the day, it soon became natural to him to make art *human and emotional.*

Therefore in both his playing and his composition Liszt departed from the Classic ideals of an earlier period and became an expression of his own time. In his endeavor to depict and express emotions, ideas,

[1] Henry T. Finck.

scenes of nature and even events, he felt that the old Classic forms were suited only to music that was purely music and nothing else. In the new paths that the "Music of the Future" had made for itself a new form was needed to express sensations and ideas of a new age of keener observation, intense sentiment and passionate enthusiasm. Consequently Liszt invented the *Symphonic Poem*, in which the movements are not divided as in the regular Symphony but lead into one another.

In his orchestration Liszt followed Beethoven, Berlioz and Wagner. It is always rich and heavy and full of color. Liszt makes great use of the harp and his Hungarian blood shows itself in his marvellous and stirring rhythms.

"Concerning so prodigious an activity, so far-seeing an intelligence, so all-embracing a mind, so complete a musical organization, so ardent an imagination, so enthusiastic a nature, so unselfish a character, anything that may be said must seem inadequate.

"The spirit of Franz Liszt soared far above the petty meannesses of life. His influence has been great and far-reaching, and if he has left a priceless artistic legacy to the world, he has also given it a magnificent and unique example of benevolence and self-abnegation and realised to the fullest extent his own motto, *Génie oblige!*"

The third and greatest member of this remarkable trio, Richard Wagner, seems to have gathered up all that was best in the music that preceded him and having assimilated it in the crucible of his mind, gave it forth again, fresh, new and vital.

Wagner was born in Leipzig in 1803 and died in Venice, in 1883. His career as a musician began in 1833, after he had taken part in the Revolutionary politics of 1830.

His early life was spent in struggling with poverty and composing operas, which were not successful. He acquired greater fame as a *conductor* than as a *composer*. Called to be conductor of the Dresden Orchestra in 1842, he began his work by conducting works of Berlioz, who was then making a tour in Germany. (See page 251.) Berlioz speaks gratefully of Wagner's "zeal and good will" in this matter and also of the success of *Rienzi* and *The Flying Dutchman* in Dresden.

The active part he took in Revolutionary politics offended the Court; and Wagner, compelled to flee, hastened to Liszt in Weimar. Liszt got him a passport under a fictitious name; and Wagner hurried to Paris and thence to Zürich, where he finished *Lohengrin* and sent it to Liszt to produce in Weimar.

The first half of Wagner's life was singularly unhappy; the last was singularly happy. He had the good fortune to attract the interest of the young King of Bavaria, Ludwig II, who became his patron and turned Wagner's dreams into realities.

After forty years of struggle and disappointment, Wagner had his own theatre at Bayreuth, where his works were given under ideal conditions. The Bayreuth Opera House was opened in 1876, with a great performance of the *Nibelungen Ring;* and the greatest artists of the day played in the Orchestra of which Wilhelmj was the first violinist. In the meanwhile,

*Tristan* had been splendidly performed in Munich in 1865 and *Die Meistersinger* in 1868.

One of Wagner's great ideas was to make the Orchestra a vital part of his music dramas. In other words he *carried the Symphony-Orchestra* into the opera.

Wagner is the greatest master of orchestration that the world has ever seen.

"Wagner treats every instrument with the same certainty of touch as if he had played it himself. He knows, as no one else knows, how to avail himself of its resources, and he demands nothing of it beyond what is entirely within its capacity.

"Notwithstanding the large number of performers he requires, he never has recourse to complicated methods in his orchestration. The combinations are always clear and simple, resulting in a sonority that is both plain and powerful. The *Leitmotive* (guiding themes) ceaselessly move about the whole Orchestra, passing from one desk to another; but, nevertheless, each one has a fondness for one special instrument, or one group of instruments, which agrees with its character, on which it is first heard and to which it returns whenever it must be heard again with preponderating importance. Sometimes we recognize it from its very first note by means of this characteristic *timbre*.

"Wagner developed the art of orchestration, of orchestral coloring to a point before unknown, a point which is *apparently* its final limit; but in art there is no limit, its progress is endless. I will not name the person, but it seems to me that there is now

among French composers one who has surpassed Wagner in this very respect. Wagner, however, in addition to the new combinations that he devised among the various instruments of the classic Orchestra, introduced new elements, notably tubas, a family intermediate between horns and trumpets, and the bass trumpet which figures in nearly all of his scores, and singularly enriches the group of brasses without rendering his instrumentation any more noisy." [1]

"Wagner is a supreme master of instrumentation, of orchestral color. His Orchestra differs from Beethoven's in the *quality* of tone emitted; over and above effects of richness obtained by the more elaborate treatment of the inner part of the string-quartet, the frequent subdivision of violins, violas, violoncellos, the use of chromatics in horn and trumpet-parts, etc. There is a peculiar charm in the very sound of Wagner's woodwind and brass. It is fuller than Beethoven's, though singularly pure. And the reason for this is not far to seek. Wagner rarely employs instruments unknown to Beethoven, but he completes each group or family of wind-instruments with a view to *getting full chords from each group.*

"Thus the two clarinets of Beethoven's Orchestra are supplemented by a third clarinet and a bass-clarinet if need be; the two oboes by a third oboe, or a cor anglais (alto oboe); the two bassoons by a third bassoon and a double-bassoon; the two trumpets by a third trumpet and a bass trumpet, etc. The results got by the use of these additional instruments are of greater significance than at first appears, since

[1] Lavignac.

WAGNER

*Photograph taken in Munich*

each set of instruments can thus produce complete chords and can be employed in full harmony without mixture of *timbre* unless the composer so chooses.

"To account for the exceptional array of extra instruments in the scores of the *Nibelungen Ring* it is enough to say that they are used as special means to special ends.

"Thus at the opening of the *Rheingold*, the question is what sound will best prepare for and accord with dim twilight and waves of moving water? The soft notes of the horns might be a musician's answer; but to produce the full, smooth wavelike motion upon the notes of a single chord, the usual two, or four, horns are not sufficient, Wagner takes *eight*, and the unique and beautiful effect is secured.

"Again, in the next scene, the waves change to clouds: from misty mountain heights the gods behold Walhalla in the glow of the morning sun. Here subdued, solemn sound is required. How to get it? Use brass instruments *piano*. But the trumpets, trombones and tuba of Wagner's usual Orchestra cannot produce enough of it. He, therefore, supplements them by other instruments of their family: a bass trumpet, two tenor and two bass tubas, a contrabass trombone and a contrabass tuba. Then the full band of thirteen brass instruments is ready for one of the simplest and noblest effects of sonority in existence.

"At the close of the *Rheingold*, Donner with his thunder-hammer clears the air of mist and storm-clouds; a rainbow spans the valley of the Rhine and over this glistening bridge the gods pass to Walhalla.

What additional sounds shall accompany the glimmer and glitter of this scene? The silvery notes of harps might do it; but the sounds of a single harp would appear trivial, or would hardly be audible against the full Orchestra. Wagner takes *six* harps, writes a separate part for each, and the desired effect is forthcoming." [1]

It might seem that after Wagner nothing more could be done with the Orchestra. But the progress of Music, like all other arts, never ceases. We have three more great names to consider — Richard Strauss, Tschaikowsky and Debussy.

"Richard Strauss is an intellectual musician. Saint-Saëns pointed out long ago the master part harmony would play in the music of the future, and Strauss realized the theory that melody is no longer sovereign in the kingdom of tone. His master works are architectural marvels. In structure, in rhythmical complexity, in striking harmonies, ugly, bold, brilliant, dissonantal, his symphonic poems are without parallel. Berlioz never dared, Liszt never invented such marvels of polyphony, a polyphony beside which even Wagner's is child's play and Bach's is rivalled. And this learning, this titanic brushwork on vast and sombre canvases are never for formal music's sake; indeed, one may ask if it is indeed music and not a new art. It is always intended to mean something, say something, paint someone's soul. It is an attempt to make the old absolute music new and articulate.

"The greatest technical master of the Orchestra, making of it a vibrating dynamic machine, a humming

[1] Edward Dannreuther.

mountain of fire, Richard Strauss, by virtue of his musical imagination, is painter-poet and psychologist. He describes, comments and narrates in tones of jewelled brilliancy; his Orchestra flashes like a canvas of Monet, — the divided tones and the theory of complementary colors (overtones) have their analogues in the manner with which Strauss intricately divides his various instrumental choirs: setting one group in opposition, or juxtaposition, to another; producing the most marvellous, unexpected effects by acoustical mirroring and transmutation of motives; and almost blinding the brain when the entire battery of reverberation and repercussion is invoked. If he can paint sunshine and imitate the bleating of sheep, he can also draw the full-length portrait of a man. This he proves with his *Don Quixote*, wherein the noble dreamer and his earthly squire are *heard* in a series of adventures terminating with the death of the rueful knight — one of the most poignant pages in musical literature." [1]

Richard Strauss was born in Munich, in 1864. His father, Franz Strauss, was first horn-player in the Court Orchestra and could play almost every orchestral instrument. He was an extraordinary musician. Once when playing under Wagner's *bâton*, the composer said to him: "Strauss, you can't be such an anti-Wagnerite as I hear. You play my music so beautifully!" "What has that got to do with it?" the horn-player replied.

Richard early showed his great genius. He played the piano at the age of four and began to compose

[1] James G. Huneker.

at the age of six. While at school he had lessons on the piano and violin and studied composition.

"My father kept me very strictly to the old masters," says Strauss, "in whose compositions I had a thorough grounding. You cannot appreciate Wagner and the moderns unless you pass through a grounding in the Classics. Young composers bring me voluminous manuscripts for my opinion on their productions. In looking at them, I generally find that they want to begin where Wagner left off. I say to all such: 'My good young man, go home and study the works of Bach, the symphonies of Haydn, Mozart and Beethoven, and when you have mastered these art works come to me again.' Without thoroughly understanding the significance of the development from Haydn *via* Mozart and Beethoven to Wagner, these young students cannot appreciate at their proper worth either the music of Wagner, or of his predecessors. 'What an extraordinary thing for Richard Strauss to say,' these young men remark; but I only give them the advice gained by my own experience."

Strauss early attracted the attention of Hans von Bülow, who played his *Serenade* for wind instruments (op. 7) at Meiningen. In 1885 Strauss was chosen to succeed von Bülow as conductor of that famous Orchestra. In 1885 he became third *Kapellmeister* in Munich, and, in 1889, assistant *Kapellmeister* at Weimar. Later he returned to Munich as Court *Kapellmeister;* and three years later he was made general music director. For a little while he was conductor of the Berlin Philharmonic Orchestra and

in 1899 was made *Kapellmeister* at the Berlin Royal Opera, which position he still holds.

"If the now childish simplicity of Schubert's orchestration proved a stumbling block to the Viennese Orchestra only fifty odd years ago, and furthermore Wagner's *Tristan and Isolde* shared the same fate at a still more recent date, it will not be difficult to realise that Strauss fifteen years ago taxed the virtuosity of the performers with passages that are no longer dreaded.

"The flexibility of execution that formerly was expected only of a first violinist is now imposed upon all five sections of the string band and each member finds before him the pages of what looks like a concerto. To the woodwind are assigned passages that Wagner would have hesitated to write. What Strauss demands from them, Beethoven might have demanded from the strings. Most prominent of all is the attention bestowed upon the deployment of the brass as initiated by Wagner. The trumpets are treated with unprecedented freedom, and are expected to perform passages either of flowing melody, or of rhythmic intricacy in the fastest of *tempi*. The horns are taught to display the agility of violoncellos. In four-part writing, the fourth horn is much used as a deep bass instrument absolutely apart from the three upper horns. The trombones are employed as much for unallied melodic utterance as for combined harmonic effects, and the intricacy of their parts constantly necessitates the use of three staves in the score. Incidental mention might also be made of such devices for acquiring wierd tonal

tints as obtained from muted trombones. Similar to Wagner's procedure in the Overture to the *Meistersinger*, the tubas — and particularly the tenor tuba — are constantly detached from their conventional association with the trombones, for the purpose of giving expression to flowing *cantilena*.

"Novelty in the use of instruments of percussion is restricted to rhythmic peculiarities and original combinations with other instruments of more variable pitch; for Wagner's general method of handling the battery cannot be improved upon.

"In a word, the three choirs of the Orchestra have advanced one step higher. The string-band has become so many virtuoso soloists. The wood-wind replace the strings and are themselves replaced by the brass. The battery has acquired prominence such as the Classicists allowed to the trumpets and trombones.

"Strauss advances yet farther by making permanent Wagner's occasional incorporation into the Orchestra of a second harp, an E-flat clarinet, a double quartet of horns, five instead of four trumpets, and a tenor tuba in addition to a bass tuba. The occasional addition of unusual instruments, such as an *oboe d'amore* and saxophones, is required." [1]

In 1864 one of the chief critics of Russia pointed out Tschaikowsky as "the future star of Russian music." His prediction was verified. Tschaikowsky is now ranked with the great masters. His great popularity in this country is largely due to Mr. Walter Damrosch, who invited him to take part in a series

[1] Coerne.

of festival concerts in 1891 at the opening of Carnegie Hall in New York. Here Tschaikowsky conducted several of his works, many of which were already known and loved by concert-goers.

We are all familiar now with Tschaikowsky's great sweeps of tone; dark, melancholy harmonies; and strange, barbaric rhythms.

"Tschaikowsky is eclectic, and many cosmopolitan woofs run through the fabric of his music. Italy influenced, then Germany, then France; and, in his later day, he let lightly fall the reins on the neck of his Pegasus and was much given to joyously riding in the fabled country of ballet, pantomime, and other delightful places." [1]

This is perfectly true, but beyond and above all else Tschaikowsky is *Russian.*

"Like most Slavs," writes Ernest Newman, "he drew sustenance more from France than Germany. Brahms he thought dull; Wagner he never really understood. He loved music, he said, that came from the heart, that expressed 'a deep humanity,' like Grieg's. To the delicate brain and nerves of the modern man he added the long-accumulated eruptive passions of his race. He takes the language made by the great Germans and uses it to express the complex pessimism of another culture. The color of life in his music ranges from pale gray to intense black, with here and there a note of angry scarlet tearing through the mass of cloud."

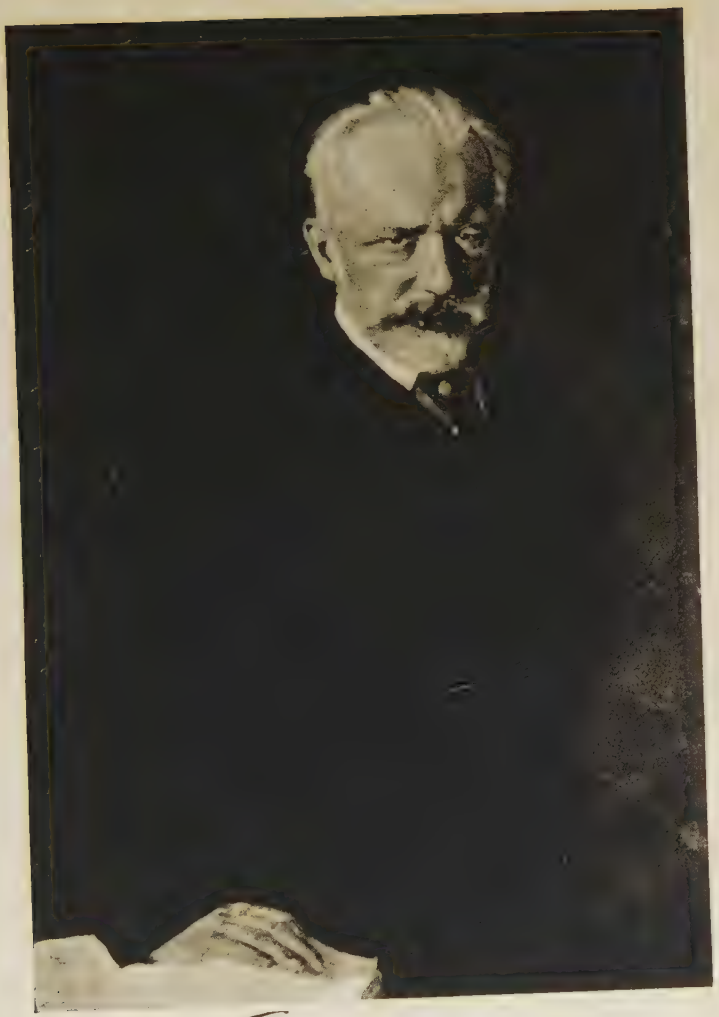
Peter Ilich Tschaikowsky was born in 1840 in Votinsk in the government of Viatka, where his father

[1] James G. Huneker.

was inspector of the government mines, soon removing to Petrograd, where the boy received his education. He studied music, played the piano well, and composed light music; but with him at this time music was merely an accomplishment and a social pleasure. In 1861 he began to study music seriously and gave up his work to face poverty for the sake of art. In 1865 he completed his course at the Conservatory, where he had attracted the admiration of Anton Rubinstein with whom he studied orchestration. As an instance of his industry Rubinstein's story may be quoted. "Once at the composition class," said Rubinstein, "I set him to write out contrapuntal variations on a given theme, and I mentioned that in this class of work not only *quality* but *quantity* was of importance. I thought perhaps he would write about a dozen variations. But not at all. At the next class I received over two hundred. To examine all these would have taken me more time than it took him to write them."

When Nicholas Rubinstein organized the Conservatory in Moscow in 1866, he gave Tschaikowsky the chair of professor of harmony. He spent much time in composing and Nicholas Rubinstein brought out his works at the concerts of the Russian Musical Society. Tschaikowsky's life is in his works. Whether in Petrograd, Moscow, in his country home, in Paris, or travelling, he was always composing; and, consequently, his list of works is long.

Although Tschaikowsky wrote light operas, he is chiefly known for his orchestral music — his magnificent symphonies and his symphonic poems. So



TSCHAIKOWSKY

*Photograph taken in Petrograd*

immense are these works in their effect that the hearer often imagines that Tschaikowsky called for an orchestra with as many additional instruments, new and old, as Richard Strauss. This is not the case, however. For instance, in the *Symphonie pathetique* he has the Beethoven orchestra with the addition of the bass tuba.

"A remarkable feature of his scoring is the extreme modern effect secured with comparatively modest means. He expressed himself in a language of profound pathos which was in part due to the embodiment of weird and gloomy orchestration. He made prominent use of low woodwind, which were constantly combined with the violas, and he evinced peculiar predilection for clarinets in their low range and bassoons in their upper range." [1]

In the *Casse Noisette* Suite (Nutcracker Suite), which is so charming in its playfulness, his instrumentation is particularly novel. In it he introduced the celesta (see page 128).

Tschaikowsky should be described as a follower of Berlioz, Liszt, and Mozart. He was particularly devoted to Mozart as his fourth orchestral suite, entitled *Mozartiana* plainly shows. In a preface to this work Tschaikowsky says: "A large number of the most admirable compositions of Mozart are, for some inexplicable reason, hardly known not only to the public but even to the majority of musicians."

Tschaikowsky died of cholera in Petrograd in 1893.

We have seen that in the days of Berlioz the French public cared more for operatic than for symphonic

[1] Coerne.

music. After Berlioz, composers devoted much more thought to the Orchestra; and French music now contains a long list of masterpieces and admirable works.

Orchestral concerts under the direction of Habeneck and Pasdeloup and afterwards under Lamoureux and Colonne did much to make symphonic music popular in Paris.

The greatest name in the development of Orchestral music since Berlioz is that of Saint-Saëns, whose orchestration, although rich and elaborate, is always clear and polished to the last degree. The exquisite Symphonic Poem, called *Le Rouet d'Omphale*, may be taken as an example. It is not merely a beautiful piece of descriptive writing, but it is beautifully scored.

Camille Saint-Saëns is the oldest living French composer. He was born in 1835 in Paris and early showed his great talent for music. At the age of seven he began to study the piano with Stamaty and harmony with Maleden. In 1846, at the age of eleven, he appeared at a concert in the Salle Pleyel; and a year later entered the Conservatory. Here he made a name for himself. His *Symphony*, composed at the age of sixteen, was successfully performed. In 1858 he became organist at the Madeleine in Paris and astonished everyone by his feats of improvisation. Meantime, he continued composing. He has produced an immense number of works that include every kind of composition from operas to chamber-music, songs and pieces for the harp.

Saint-Saëns has also been an extensive traveller

SAINT–SAËN'S FESTIVAL CONCERT

*Paris*, 1896

and has spent much time in Algiers. He is an incomparable pianist, a fine musical critic, and an excellent writer. Saint-Saëns is another instance of the general culture required of the modern musician — the type that came into existence after the Revolution of 1830 (see page 244).

Saint-Saëns was made an officer of the Legion d' Honneur in 1884. On June 2, 1896, the fiftieth anniversary of his first public appearance was celebrated in the Salle Pleyel, on which occasion Taffanel conducted the orchestra and Sarasate played a sonata by Saint-Saëns (see illustration facing 268), with the composer at the piano. At the age of seventy he came to America and astonished his audiences by playing his five piano concertos, accompanied by Walter Damrosch and the New York Symphony Orchestra, with marvellous skill and the fire of youth.

Debussy is a modern of the moderns; and, moreover, he has led music into a new path.

Debussy is, however, but one of a group of French musicians who, for the last thirty or forty years, have been developing French music more according to the traditional taste of their nation than it had been since the days of Rameau. In fact, these musicians have carried music back to its fountain head; and we may say that the same spirit that characterized the works of the *trouvères* of the Fifteenth Century (music such as is being played by King René's musicians in our frontispiece); the same spirit that was expressed in the music of the French Renaissance; the same spirit that was heard in the operas and ballets of Lully and Rameau lives again, though in a new form.

Of all these modern French composers — Gabriel Fauré, Maurice Ravel, Albert Roussel, Emmanuel Chabrier, Vincent d'Indy, Ernest Chausson, Henri Duparc, Paul Dukas, Florent Schmitt, Déodat de Séverac, and Ernest Satie — Claude Dubussy is the leading spirit; and, perhaps, the greatest genius.

Claude Achille Debussy was born at Saint-Germain-en-Laye, in 1862. He entered the Conservatory in Paris at the age of twelve and studied under Albert Lavignac, Marmontel, Durand, and Guiraud. In 1884 he took the *prix de Rome;* and from the Eternal City he went to Russia. On his return to Paris he became one of the frequent guests at those famous *soirées* of Mallarmé, where painters, poets, sculptors, and musicians gathered.

His piano works, songs, instrumental pieces, and orchestral compositions, such as *L'Après midi d'un faune*, were admired by many persons on their first hearing; but his audience was comparatively small until the opera of *Pelleas et Mélisande* made him known throughout the world. Here was an entirely new idea in music. The Orchestra did not annotate, nor emphasize the actions of the persons on the stage, but it became a soft, melodious atmosphere, a delicious web of harmony enfolding the entire work. It was like nothing that had ever been written.

One idea of Debussy's in orchestral writing is to get the greatest effect with the simplest means. To produce these effects Debussy employs many old scales and harmonic chords. His instrumentation, therefore, seems diaphanous, ethereal, and suffused with delicate, opalescent colors. He is in sympathy

DEBUSSY

*Photograph taken in Paris*

with the *impressionists* in painting and the *symbolists* in poetry. The fluid quality of his music lends itself to the description of water. His works are full of the sound of water — the sea, fountains, and silvery rain falling upon dim gardens. He creates a sense of mystery and atmospheric beauties as no one else has ever done.

In the *Afternoon of a Faun*:

"The ascending and descending introductory bars given out by an unaccompanied flute convey an idea of pastoral charm. A characteristic bucholic horn motive follows, and the first theme is repeated with muted string accompaniment. The whole scoring of the composition is of cobweb delicacy. The Orchestra is composed of three flutes, oboes, clarinets, four horns, two harps, antique cymbals, and strings. The principal themes are given by clarinets, oboes, and harps respectively. A scale of whole tones is heard on the clarinet; this leads to another section marked *più animato*, in which the oboe voices the principal theme. These subjects are all interwoven with and linked to other themes. They are heard sometimes as solos, sometimes concerted. The rhythm of the whole work is free and varied. The strings, muted or otherwise, are often used as a kind of background to the wind solos, which is most effective. A veil of palpitating heat seems to be suffused over the composition and corresponds to the glow of Eastern sunlight in the poem and also to the remote, visionary nature of the poet's imagery and fancies. The tone poem also recalls the golden noon of an Idyl of Theocritus. All through the piece the composer

preserves this feeling of elusiveness, of mirage: he attains it by the use of delicate unusual harmonies and by the silvery, web-like tracery of his phrases. The frequent use of the scale of whole tones and the unresolved dissonances produce a distinct charm of their own. The chords are of an exceeding richness and present a depth of glowing color. The interspersed solos for violin, oboe, clarinet, *cor anglais*, resemble dainty broidery, and portray intimately the ramifications of doubt and longing in the faun's mind, which he likens to a multitude of branches with slender pointed sprays and sprigs." [1]

Debussy thus explains some of his titles: "The title of *Nocturnes* is to be interpreted in a wider sense than that usually given, and most especially it should be understood as having a decorative meaning. Therefore, the usual form of Nocturne has not been considered, and the word should be accepted as signifying in the fullest manner diversified impressions.

"*Nuages* (clouds) — the unchanging aspect of the sky and the slow, solemn movement of the clouds dissolving in gray tints lightly touched with white.

"*Fêtes* (festivities) — the restless dancing rhythm of the atmosphere interspersed with sudden flashes of light. There is also an incidental procession (a dazzling imaginary vision) passing through and mingling with the aërial revelry; but the background of uninterrupted festivity is persistent with its blending of music and luminous dust participating in the universal rhythm of all things.

"*Sirénes* (sirens) — the sea and its perpetual rhythm,

[1] Mrs. Franz Liebich.

ORCHESTRA OF THE SYMPHONY SOCIETY OF NEW YORK

*Walter Damrosch conducting*

and then amid waves silvered by moonbeams are heard the laughter and mysterious song of passing sirens."

Some critics have called Debussy a revolutionist. They are wrong. Debussy's musical ancestors are Rameau and Couperin; and his works show us that "*revolution* is merely *evolution* made clear for all to see."

Such is the French music of the present — beautiful, refined, clear, polished, delicate, enchanting!

We, in our great country, like to hear all schools of music, and our wonderful orchestras are able to play equally well the works of all composers and of all schools and nationalities. Some of us prefer the French, some of us the Russian, and some of us the German Schools; but our taste is broad and cultured, and we wish to hear the various ways in which the musical minds of the day are expressing themselves.

What an advance since the days of "a consort of lutes, or viols"! What a development since the Fifteenth Century, when gentle ladies played the *psaltérion* and flute and *vielle*, as seen in our frontispiece! But to appreciate the evolution of the Orchestra, let us look at the picture of an Orchestra of the Eleventh Century (facing page 274), the earliest known representation of any Orchestra, taken from the capital of a column of a church near Rouen, and then compare it with the picture of the Symphony Society of New York (facing page 272).

Between these two Orchestras, separated by a period of eight hundred years, we can realize the progress of "music's ever welling spring, which has flowed through the centuries until it has become an ocean."

CHAPTER IX

# THE CONDUCTOR

*The Score; a page from Beethoven's Fifth Symphony; requirements of a Conductor; Lully; Wagner; our Symphony Orchestras.*

THE Orchestra, a great instrument, composed, as we have seen, of so many different instruments, voices, and human personalities, awaits the Conductor before it becomes of value.

He enters, takes his stand before his men, raises his tiny white *bâton*, and the large body is vitalized into sound. All these many vibrations and voices reach our ears; and we, following the unfolding patterns and musical phrases, put them all together in the shape and form that the composer heard in his dreams, reduced to writing and made permanent for posterity.

It is the Conductor's work to make this musical pattern clear to us and to realize the composer's intentions. If the Conductor did not understand the composition as preserved in the printed score, we could not put together all these musical fragments. It would be nothing but a broken-up jig-saw puzzle!

A Conductor has to *know* the score.

To read a score requires a very high order of musical intelligence. Some of us have never thought to ask what the big book looks like that lies on the Conductor's desk. Facing page 276 is a page from the Conductor's score of Beethoven's Fifth Symphony.

ORCHESTRA OF THE ELEVENTH CENTURY

It is the opening of the second movement, *Andante con moto.*

We know that the Soprano sings, or plays, in the Treble Clef, the Bass in the Bass Clef, and the Altos in the Alto Clef. Those who play the piano have learned to play in the Soprano and the Bass Clefs simultaneously; for the right hand plays the one, and the left hand the other. A violinist only knows the Soprano Clef; those who play the viola, play in the Alto, or Soprano Clef; and those who play the violoncello, play in the Bass, Tenor and Soprano Clefs, for they have to play in them all from time to time. The Conductor has to read *all the parts of the Orchestra at once,* — and in all the Clefs. Let us look at our illustration. The flutes on the top line and the oboes next play in the Soprano Clef; the clarinets play in the Soprano Clef but *in a different key* (B); then the bassoons play in the Bass Clef; then the horns in C (still another key); then the trombones in C; then the *tympani, or kettledrums,* in C and G; then come the strings: the violins and second violins playing in the Soprano Clef; the viola in the Alto, or Tenor Clef; the violoncellos in the Bass Clef; and the double-basses in the Bass Clef. Notice that a long line divides the bars, a line drawn, or *scored,*[1] through all the staves from top to bottom.

In our example we have twenty-two bars of continuous music. The viola[2] and violoncello begin the melody, with the double-bass playing *pizzicato*

[1] The name "score" is derived from this scoring. This in other languages is *partition* (French); *partitio* (Italian); *partitur* (German); meaning a collection of parts.

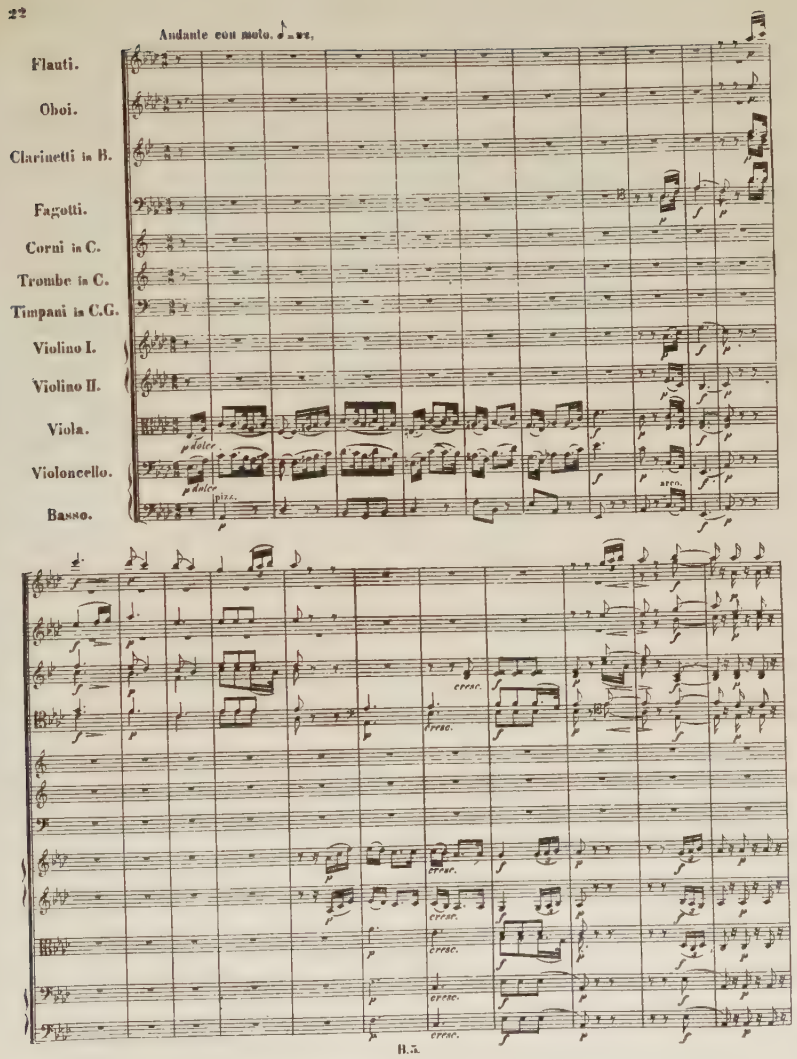
[2] See page 52.

at first and taking up the bow in the ninth bar. All the other instruments are silent, as the rests show, until the violas and violoncello have finished their gentle, sweet melody, when the bassoons and violins add a finish to it. Then the cool woodwind plays a lovely little part, and the warm violins come in as the liquid flutes, oboes, clarinets, and bassoons finish their phrase; and then the woodwind and strings play together, the horns, trumpets, and drums keeping silent; and — we cannot see what comes now, for we are at the end of this page. This one page gives an idea of what the Conductor has to do. He has to bring out the melody, get the right accents, give the right shading (the *pianos* and *fortes*), and make the right *crescendos* and *dimuendos*, besides adding a poetic conception, so as to render the melodies flowing and graceful and to bring out the composer's inner meaning.

What a quick and trained eye a Conductor must have to read the score, both perpendicularly and horizontally at the same time!

Of course, an acute ear must be another of his gifts; and his natural ear is trained and rendered more acute by experience.

An innate sense of rhythm must belong to a Conductor. He must have also an appreciation of melody and an intuition that divines the subtle melodies, melodic phrases, and beautiful harmonies that lie hidden in the score. He must also have some of the qualities of a painter to bring out light and shade and varieties of color — glowing hues and delicate tints — from the instruments that are ranged before him ready to obey his magic wand.




PAGE FROM CONDUCTOR'S SCORE

*Beethoven's Fifth Symphony*

The Conductor must also have a literary and a poetic sense to understand the romantic and historical subjects, which composers so often select as themes; and he must have imagination to visualize a picture in his own mind before he can make his own Orchestra and his audience follow the music, or the phrases, that go to make up that picture, or that *musical impression of a picture.*

In a certain sense, the Conductor *leads his audience*, though most of us are unconscious of his power in this particular. We, to a certain degree, see the musical picture that the Conductor sees; for we have only the threads he gives us — the scarlet and blue and green and purple and lilac and golden threads with which we may weave as we listen the beautiful musical tapestry, the cartoons for which may be said to lie in the pages of the score.

Though it is often said that the "virtuoso-conductor" was practically unknown until the middle of the Nineteenth Century, that statement is far from correct. If you will read again the description of Lully's Orchestra (pages 162–172) you will see that he has a splendidly trained body of highly artistic performers. Lully's methods of polishing his material were not unlike those in use to-day. Corelli, too, must have polished his Orchestra highly; for his violinists all played as one man (see page 180).

It is a great mistake to condemn performances of the past and to think that because tastes differed from ours that Orchestras were primitive. There was nothing primitive in the cultured days of the Renaissance, nor in those of Louis XIV.

We may be very sure that the lutes and viols, with their complicated strings and intricate system of tuning, required *virtuosi* to play them artistically and romantically to suit the culture of the age; and that the Conductors had something more to do than beat time, even if they sat at the *gravicembalo*, or harpsichord.

Moreover, the audiences of the Sixteenth and Seventeenth Centuries were highly cultured men and women. There were also many brilliant amateur musicians. Perhaps, on the whole, amateurs reached as high a degree of excellence as they do to-day.

Lully was undoubtedly a very great Conductor; and there does not seem to have been any one after him who stood for such perfect performances as his until Wagner pointed out the path for Conductors to follow.

Wagner's criticisms in his *Art of Conducting* show that the Orchestras of Europe — even the famous ones — gave interpretations of the Classic composer that we, Americans, would not tolerate; for it is no exaggeration to say that the Orchestras of our country have for many years been the most brilliant, the most finished, and the most poetic in the world. This condition we owe to the guiding minds and high artistic aims of the versatile and intellectual Conductors who have developed our Symphony Orchestras, and to the fact that no national prejudice prevents them from taking the best players from any country; the woodwind from France and Belgium; the strings from Austria; the brass from Germany; together with an ever-increasing number of young Americans who show adaptability in all the orchestral groups.

RICHARD STRAUSS CONDUCTING

CHAPTER X

# THE HARP

*Berlioz on the harp; construction of the harp; the harp an ancient instrument; the Egyptian harp; Greek and Roman harps; the Irish harp; quotation from Giraldus; the Welsh harp; the Scotch harp; quotation from Galilei; the Mediaeval harp; improvements in the harp; Sebastian Érard; use of the harp in the Orchestra.*

"THE harp," writes Berlioz, "is essentially anti-chromatic, that is to say succession by half-tones are almost out of the question for it. Its compass was formerly but five octaves and a sixth. All harps were tuned in the scale of E-flat. The skilful manufacturer, Érard, seeking to remedy the inconvenience of this system, invented the mechanism which obviated these difficulties and proposed tuning the harp in C-flat, which has been adapted by all harp-players of the present day.

"To instruments so constructed was given the name of *double-action harps*. This is of what it consists and wherefore it allows the harp — if not to play chromatic successions — at least to play in all keys and to strike, or *arpeggio*, all chords. The double-action harp is tuned in C-flat; and its compass is six octaves and a quarter.

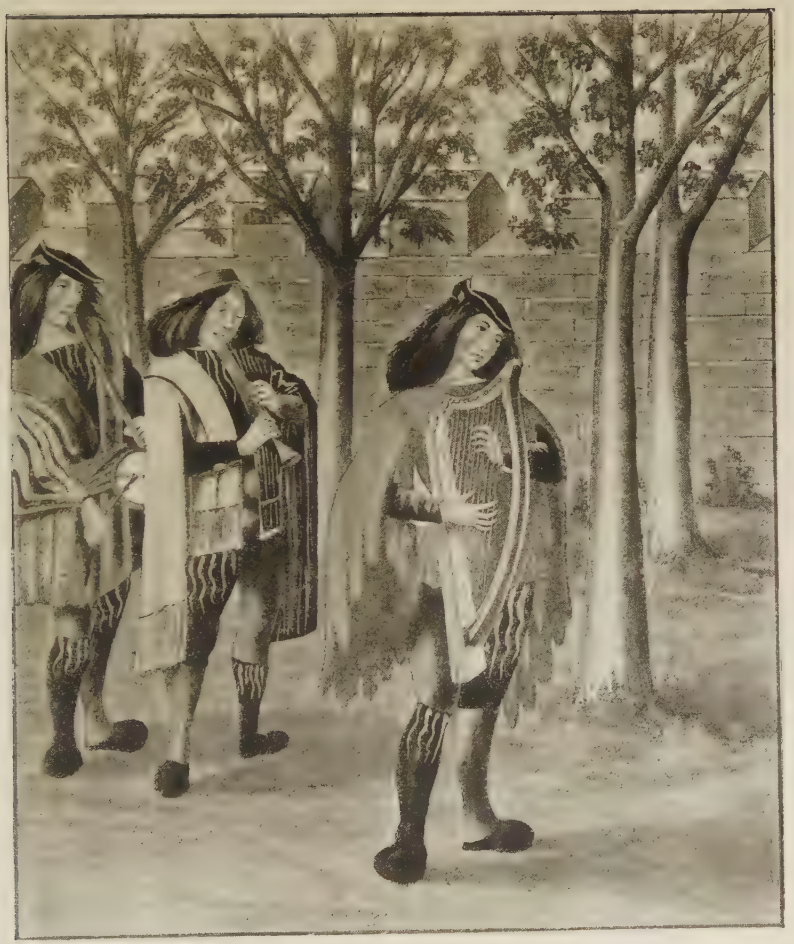
"The seven pedals with which it is furnished are made so that the player may, by means of each of them, raise at option each string a tone, or a semitone, only. By taking in succession the seven semitone

pedals, the harp in C-flat can therefore be set in G-flat, in D-flat, in A-flat, in E-flat, in B-flat, in F and in C-natural.

"The nature of the instrument having been explained, we proceed now to the fingering, which many composers confound with that of the pianoforte, which it nowise resembles. With each hand chords of four notes may be struck, of which the two extreme notes do not extend beyond an octave. Also, by a great stretch of the thumb and little finger, chords of a tenth may be reached, but this position is less convenient, less natural, and, therefore, less sonorous, since none of the fingers can attack the string with as much force as in the ordinary position.

"The successive execution of the notes of a chord, either ascending, or descending, is perfectly in the character of the harp. It is even after its Italian name, *arpa*, that these passages have received the name of *arpeggios*. The *shake* exists for the harp, but it is only tolerable on the high notes.

"The effect of harps is in proportion better as they are in greater number. The notes, the chords, or the *arpeggios* which they throw out amidst the Orchestra are of extreme splendor. Nothing can be more in keeping with the ideas of poetic festivities, or religious rites, than the sound of a large body of harps ingeniously introduced. Alone, in groups of two, three, or four, they have also a most happy effect, either uniting with the orchestra, or serving to accompany voices and solo instruments. Of all known qualities of tone it is singular that the quality of horns, of trombones, and, generally, of brass instruments mingles best with



MINSTRELS PLAYING HARP, FLUTE, AND PIPE AND TABOR

*Fifteenth Century*

theirs. The lower strings (exclusive of the soft and dull strings of the extreme depth), the sound of which is so veiled, so mysterious, and so fine, have scarcely ever been employed except for bass accompaniments of the left hand; and the more the pity! It is true that harp-players care little to play long pieces among those octaves so far removed from the body of the performer that he must lean forward with his arms at full length, maintaining this awkward posture for more or less time; but this motive can have had but little weight with composers. The fact is they have not thought to avail themselves of this especial quality in tone.

"The strings of the last upper octave have a delicate, crystalline sound of voluptuous freshness, which renders them fit for the expression of graceful, fairy-like ideas and for giving murmuring utterance to the sweetest secrets of smiling melodies, on condition, nevertheless, of their never being attacked with violence by the performer, as in this case they yield a dry, hard sound, similar to that of broken glass — disagreeable and snapping.

"The harmonics of the harp — particularly of many harps in unison — are still more magical. Solo players frequently employ them in the pedal-points and cadences of their fantasias, variations, and concertos. But nothing comes near the sonorousness of these mysterious notes, when united to chords from flutes and clarinets playing in the medium register.

"The best, and almost the only, harmonics for the harp are those obtained by touching with the lower and fleshy part of the palm of the hand the centre

of the string, while playing with the thumb and two first fingers of the same hand, thus producing the high octave of the usual sound. Harmonics may be produced by both hands. It is even possible to produce two, or three, at a time with one hand; but then it is prudent to let the other have but one note to play.

"All the strings of the harp are not fit for harmonics — only the last two octaves should be employed for this purpose; they being the sole ones of which the strings are sufficiently long to admit of being divided by touching in the centre and sufficiently tightened for neatly producing harmonics."

The framework of the double-action harp consists of the soundboard opposite which is the vertical pillar. Both support the "neck," a sort of curved bracket, graceful in shape. The neck contains the "comb," which holds the mechanism for raising the pitch of the strings. The pillar is hollow and holds, concealed within it, the rods working the mechanism. The pillar and soundboard are also united in the "pedestal," which is the frame for the pedals. These pedals are levers, which are moved by the feet and move the rods in the pillar.

The wood used in a harp is generally sycamore, but the soundboard is pine. Along the centre of the soundboard a strip of beech, or other hard wood, is glued in which are inserted the pegs that hold the lower ends of the strings. The upper ends of the strings are wound round tuning-pins inserted into the wrest plank, which forms the upper part of the neck.

The forty-seven strings are of catgut colored for the convenience of the player. The eleven longest are covered with wire, or silk. The uncovered C-strings are colored red and the F-strings, blue. The harp player rests the instrument upon his right shoulder and plays from the treble side.

The harp is a very ancient instrument. It was played thousands of years ago in Egypt and Assyria. In fact it was the favorite instrument of the Egyptians and it was often magnificently ornamented. The Egyptian harp had no front pillar, and sometimes it looks in the hands of the player like a boat with a sail of strings. Sometimes it stood six feet high. There were a great many sizes and varieties, as are seen in wall-paintings and other decorations.

The big Egyptian harp, with its dull, heavy thudding sounds, was characteristic of Egyptian music, and Verdi has marvellously reproduced this effect in his opera of *Aïda*.

All ancient nations seem to have used the harp in some form, or another. And it never seems to have gone out of fashion. Cultured races and primitive peoples alike played the harp. The Greeks had three-cornered harps and the Romans had harps with a curved frame, pegs, and sound-box. The famous lyre was a kind of harp. The ancient Irish harp, called *cruit*, and also *crwth*, which in time became a sort of fiddle-harp and was played with a bow, seems to have been an ancestor of the violin. As early as 200 B.C. the Irish children were taught that "the spirit of song dwelt among the trembling strings of the *cruit*."

The Irish harp was famous. So were the Irish

harpers. Bishops and abbots travelled about the country with their harps, and the Irish bard with his harp was a familiar figure as early as the Sixth Century.

When the great gathering, or Parliament, was held periodically at Tara, County Meath, there was minstrelsy in the banquet-hall after every day's business. The last Parliament, or Feis, of Tara, was held in 560 under Fergus; and never more after that gathering was the "harp heard in Tara's halls."

An Irish saga of the Seventh Century describes nine Irish harpers as having "gray winding cloaks, with brooches of gold, circlets of pearls round their heads, rings of gold around their thumbs, torques[1] of gold around their ears, and torques of silver around their throats."

Trinity College, Dublin, owns a harp that is supposed to have belonged to King Brian, "Brian Boru," the hero, who was slain in the hour of victory over the Danes at Clontarf near Dublin in 1014. His harp was rescued by his son, who took it to Rome and gave it to the Pope. It is the old hand-harp of the minstrels.

In 1185 Giraldus, appointed by King Henry II tutor to his son, Prince John, accompanied the latter to Ireland. On his return he wrote a book describing the remarkable things he had seen in that country and paid the following tribute to the Irish harpers:

"The cultivation of instrumental music by this people I find worthy of commendation. In this their skill is *beyond all* comparison superior to that

[1] Circles.

of any nation I have ever seen; for their music is not slow and solemn, as in the instrumental music of Britain to which we are accustomed; but the sounds are rapid and articulate, yet at the same time sweet and pleasing. It is wonderful how, in such precipitate rapidity of the fingers the musical proportions are preserved, and by their art, faultless throughout, in the midst of the most complicated modulations and most intricate arrangements of notes; by a velocity so pleasing, a regularity so diversified, a concord so discordant, the melody is preserved harmonious and perfect; and whether a passage, or transition, is performed in a sequence of fourths or fifths, it is always begun in a soft and delicate manner, and ended in the same, so that all may be perfected in the sweetness of delicious sounds. They enter on and again leave their modulations with so much subtlety and the vibrations of the smaller strings of the treble sport with so much articulation and brilliancy, along with the deep notes of the bass; they delight with so much delicacy and soothe so charmingly, that the great excellence of their art appears to lie in their accomplishing all this with the greatest seeming ease and without the least appearance of effort, or art."

The Welsh harpists learned from the Irish, as Wharton, in his *History of English Poetry*, testifies: "There is sufficient evidence to prove that the Welsh bards were early connected with the Irish. Even so late as the Eleventh Century the Welsh bards received instruction in the bardic profession (music and poetry) from Ireland.

The typical harp of the Welsh was called *telyn;* but it does not seem to have differed much from the Irish harp. Harp competitions were a feature of the Welsh Eisteddfod that corresponded to the Irish Feis. In the Highlands of Scotland the harp was called *Clarsach.* It is mentioned in almost every poem, ballad, song, and story. Everybody played the harp; even the children eagerly tried to sweep the strings with their little fingers. In the Poem of *Trathal* the hero's wife remains at home. "Two children with their fair locks are at her knees. They bend their ears above the harp, as she touches with her fair hands the trembling strings. She stops. They take the harp themselves, but cannot find the sound they admired. 'Why,' they ask 'does it not answer us? Show us the string where dwells the song.' She bids them search for it till she returns. Their little fingers wander among the wires." There was hardly a household of the Highland chieftains which did not have bard, or harper; and in many old castles the "harper's seat," "the harper's window," or "the harper's gallery" is shown with pride to visitors.

Playing the harp was a general accomplishment.

George Buchanan, in his *History of Scotland,* published in 1565, says the people "delight very much in music, especially in harps, of their own sort, some of which are strung with brass wire and some with intestines of animals. They play on them either with their nails grown long, or with a pectrum. Their only ambition seems to be to ornament their harps with silver and precious stones. The lower ranks, instead of gems, deck theirs with crystal. They

HARP OF THE FOURTEENTH CENTURY

*King David*

sing poetical compositions celebrating the exploits of their valiant men. Their language is that of the ancient Gauls, a little altered."

In England the harp was a regal accomplishment, and every gentleman as well as prince could sing to the harp and play his own accompaniment. Every one knows how King Alfred, who was a fine musician, explored the Danish camp in the guise of a minstrel. All the early literature of England is full of allusions to the harp and harp-playing. The harp always appeared at ceremonies. For instance, in 1413, at the Coronation of Henry V, "the harmony of the harpers drawn from the instruments struck with the rapidest touch of the fingers, note against note, and the soft, angelic whisperings of their modulations, were gratifying to the ears of the guests."

In 1251 the new coinage of Ireland "was stamped in Dublin with the impression of the King's head in a triangular harp. The arms of Leinster on a field *vert*, a harp, *or* stringed *argent*, were subsequently applied to the whole kingdom of Ireland.

At the end of the thirteenth century Vincenzo Galilei writes: "This most ancient instrument was brought to us from Ireland (as Dante says), where they are excellently made, and in great numbers, the inhabitants of that island having practised on it for many a century. Nay, they place it in the arms of the kingdom and paint it on their public buildings and stamp it on their coinage, giving as a reason their being descended from the royal prophet David. The harps which these people use are considerably larger than ours and have generally the strings of brass and a

few of steel for the highest notes, as in the clavichord. The musicians who perform on it keep the nails of their fingers long, forming them with care in the shape of the quills which strike the strings of the spinet."

The harp appears frequently in illuminated manuscripts. It is played by ladies as well as by gentlemen, and by amateurs as well as by professional musicians. It is always of the type shown in the illustration of King David, facing page 286, taken from a manuscript of the Fourteenth Century.

Another Mediaeval harp is shown in our illustration, facing page 280. This picture is taken from a beautiful illuminated manuscript of the famous *Romaunt of the Rose*, by Guillaume de Lorris and Jean de Meung, made in the Fifteenth Century. The first minstrel is playing the harp; the second, the flute; and the last the "pipe and tabor." They are richly dressed. The first minstrel is wearing purple and black hose, scarlet mantle, green sleeves, and black velvet cap; the second in purple and green hose, pink and black mantle, green sleeves, and red velvet cap; the third minstrel is wearing purple and green hose, green and purple mantle, and black velvet cap. The small, green leaves of the trees over the brown wall show that the time is early spring.

The Mediaeval harp had but one scale; and the only way to shorten the string was to press it down firmly with the finger.

Gradually people tried to improve the harp. The first idea of pedal mechanism is due to a Bavarian named Hochbrucker in 1720. Further improvements were made by Cousineau, a French harper, and his

son, who doubled the pedals and the mechanism connected with them and practically originated the idea of the modern harp. Cousineau also arranged the pedals in two rows.

Then came Sebastian Érard, born in Strassburg in 1752, but who went to Paris and became a famous maker of pianos. During the Revolution he fled to London, but in 1796 returned to Paris, where he died in 1831. His improvements in the harp date from about 1786 and were at first confined to single action. He made his first double-action harp in 1801; and in 1810 produced the perfect model that has never been surpassed.

Handel introduced the harp into his orchestral scores. In the oratorio of *Esther*, produced at Cannons for the Duke of Chandos in 1720 and performed in London in 1732 he used it in combination with the theorbo in "Breathe soft, ye winds"; Mozart wrote a Concerto for the Flute and Harp for the Duc de Guisnes and his daughter. Spohr wrote much for the instrument (his wife was a harpist). Meyerbeer, the first to use the double-action harp, called for two in *Robert le Diable*. Berlioz introduced a lovely trio for two flutes and a harp in *L'Enfance du Christ*.

Liszt treats the harp most poetically; and it occurs in almost all of his works. Wagner makes it conspicuous in *Das Rhinegold* and *Die Walküre*. It is strikingly used by Richard Strauss and Debussy. The modern school of Russian and French composers treat the harp as an orchestral instrument rather than as a solo instrument, making its voice a part of the woven web of melody and harmony.

CHAPTER XI

# THE PIANOFORTE

*The dulcimer and the psaltery or psaltérion; ancestors of the pianoforte; the jacks; the spinet; the virginal, the gravicembalo or harpsichord; the Ruckers of Antwerp; the pianoforte; Cristofori; Liszt; the pianoforte a hundred years ago.*

THE piano, or harpsichord, ceased to belong to the Orchestra in the days of Haydn; but it is often called upon to play a Concerto with the Orchestra and of late composers have again been experimenting with it as an orchestral instrument.

A description of its mechanism would be dull. Like every other instrument, the piano was a development of older instruments; and as it developed composers changed their style of writing for it. We can follow the development of the piano by following a chronological list of compositions, from the preludes and fugues of Bach; the suites for the clavecin and clavier of Handel, Couperin, and Rameau; and the early sonatas of Mozart and Beethoven to the big sonata of Beethoven, written for the "hammer clavier," op. 111, and the elaborate *Hungarian Rhapsodies* of Liszt, and so on. With the development of the piano came the development of *touch*. In the days of the harpsichords and clavichords there was practically no such thing as *touch*. There was brilliant execution, of course, and effects were produced; but *touch* developed

after the piano had been equipped with its softly padded hammers and its improved action.

The modern piano is a miniature orchestra; and since the days of Liszt pianists have sought to get orchestral effects from it. More literature has been written for the piano than for any other instrument.

To find the origin of the pianoforte we must go back to the dulcimer and the psaltery, or *psaltérion.* These two instruments are much alike, differing only in the way they were played. The strings of the dulcimer were set in vibration by hammers held in the hands of the performer, and the strings of the psaltery were plucked with an ivory, metal, or quill, plectrum, or even by the fingers. The psaltery was smaller than the dulcimer and had fewer strings. Perhaps the name dulcimer was derived from the words *dulce melos,* sweet melody; but it was only one of the names for the instrument. The French called it *tympanon;* the Italians *cembalo* and *salterio tedesco* (German psaltery); and the Germans *hackbrett,* a board for chopping sausage-meat. The Hungarian, or Magyar, name for it is *cimbelom.* It is played in Hungarian bands.

The dulcimer was a three-cornered or trapeze-shaped instrument, about three feet at its widest part composed of a wooden frame inclosing a wrest-plank for the tuning pins around which one end of the strings were wound; a soundboard with two or more soundholes; and two bridges over which the strings passed. Opposite the wrestplank there was a hitchpin-block, to which the other ends of the strings were attached.

The dulcimer had about fifty notes, and several strings (two, three, four, and even five) were used for each note. They were of fine wire. The dulcimer was placed on a table and struck with hammers, the heads of which were of leather, hard on one side and soft on the other to get the required loud and soft *forte* and *piano* effects. There was no damping (checking) contrivance to stop the vibration.

The compass was from two to three octaves from C or D in the Bass Clef. The psaltery and dulcimer came from the East; they had been known in Persia and Arabia for centuries when the Crusaders made their acquaintance and brought them home. Chaucer describes the instrument in his *Miller's Tale*, (*Canterbury Tales*) as "a gay sauterie." It appears in that beautiful fresco of Orcagna's, *Triumph of Death*, in the Campo Santo in Pisa (1348) and in many illuminated manuscripts of the Middle Ages. From its likeness to the shape of a pig's head, old writers often call it *Istromento di porco*.

Even as late as 1650, when instruments had improved so greatly, Kircher wrote in his *Musurgia* that the psaltery played with a skilled hand is second to no other instrument, and Mersenne praises "its silvery tone and purity of intonation so easily controlled by the fingers." These two instruments were often beautifully decorated and inlaid and the sound-holes artistically treated.

If we look at the frontispiece we will see the psaltery, or *psaltérion*, resting on the lap of the lady on the extreme left, who holds the plectrum delicately, but firmly, in her right hand. But to reach our

# THE THIRD BOOK.

LICENSED,
*Dec.* 1. 1688. *Rob. Midgley.*

A

VIOLINIST, SINGER, AND LADY PLAYING THE VIRGINAL

modern piano from these two quaint instruments we have to travel through several centuries.

We get into a tangle of names when we stir up the ancestors of the pianoforte. The dulcimer and psaltery are simple enough, but from them we come immediately to the *clavicembalo* (one of the Italian names for the harpsichord), or *gravicembalo*, as it was also called, which name was derived from *clavis*, a key, and *cembalo*, a dulcimer. Then we get the French *clavecin* (which comes from *clavicymbalum*) *clavichord*, harpsichord, *harpsicordo*, *clavicordo*, and *clavier*. Then in the same group we have the virginal and the spinet, closely allied to these forerunners of the pianoforte in everything but their names.

Students of the piano are often puzzled to know why they are given a *Suite de pièces pour le clavecin*, or a Prelude and Fugue from the Well-tempered [1] Clavichord.

It is well to remember that the *clavecin* (French), the *clavicembalo* or *gravicembalo* (sometimes *cembalo* alone) and *harpsichordo* (Italian), and *Clavicymbel* or *Flügel*, meaning wing, from its shape (German) are all names for the harpsichord. All of these, as we will see by looking at the picture facing page 182 of Scarlatti at the *gravicembalo*, and that facing page 296 from Peter Preller's *Modern Music Master* (London), showing a gentleman at the harpsichord, have the form of our modern concert piano. On the other hand, the *clavicordo*, *clavichord*, and *clavier*, spinet and virginal, are of the square, oblong type, like the old square piano that has almost gone out of use.

[1] Well-tuned; not applying to the instrument's disposition.

In all the instruments of the piano family, the place of the plectrum of the psaltery is taken by the "jack," which was usually made of pear-tree. It rested on the back end of the key-lever with a movable tongue of holly kept in place by a bristle spring. Projecting at the end of the tongue at right angles was a thorn, or a spike of crowquill. As the key was pushed down, the jack was forced upwards and the quill brought to the string, which it plucked. The string was "damped" (softened) by a piece of cloth above the tongue. When the finger left the key, the key sprang upward to its own level and the jack fell. The jack, is exactly the principle of the plectrum of the psaltery adjusted to a key.

The hammer of the pianoforte is only the old hammer of the dulcimer made into a part of the *action*, or mechanism, of the piano.

The spinet was a keyed instrument with jacks. According to Dr. Burney it was a small harpsichord, or virginal, with one string to each note. Though many writers persistently say that the name was derived from the spine, or thorn, that plucked the strings, an old Italian book, published in Bologna in 1608, says: "The Spinetta received its name from its inventor, Giovanni Spinetti, of Venice." One of his instruments is dated 1503. Very beautiful cases were made for these old Italian spinets which were sometimes painted by great artists.

Annibal Rosso made a new kind of spinet without a case, showing the soundboard with the wires lying flat like a harp. In England this *Spinetta traversa* was called the Stuart, Jacobean, or Queen Anne, Spinet,

and also the couched harp. The spinet made its way from Italy to France, the Netherlands, Germany, and England.

The largest spinets were called the virginals. The word "virginal" appears in a book by Virdung, published in Basle in 1511, which contains a picture showing an instrument of the same shape as the clavichord and with the same arrangement of the keyboard.

According to Prætorius, who wrote about a hundred years later, the word "virginal" was used for a quadrangular instrument. However, from the time of Henry the Seventh to the close of the Seventeenth Century the word was used to describe all quilled keyboard instruments, — the harpsichord and trapeze-shaped spinet as well as the regular virginal of Virdung and Prætorius. Henry the Eighth was a fine performer on the virginal and so was his daughter Queen Elizabeth.

Facing page 298 is a typical virginal of the Seventeenth Century; and we can see from the performer just how the hands were placed on the keyboard. This is taken from the title-page of Playford's *Banquet of Music*, published in London in 1688.

Very often in literature we find "a pair of virginals" mentioned; for example Pepys, describing the Great Fire of London in 1666, writes: "I observed that hardly one lighter, or boat, in three that had the goods of a house in but there was a pair of virginals in it."

The clavecin and harpsichord seem to have supplanted the psaltery some time in the Sixteenth Century. The *gravicembalo* or *clavicembalo* was, as we have seen, a conspicuous member of Monteverde's

Orchestra (see page 143). It remained in the Symphony Orchestra until the days of Haydn, who got rid of it.

Originating in Italy, it spread northward into France, Germany, the Netherlands, and England.

The earliest mention of the harpsichord is under the name *clavicymbolum* and occurs in the rules of the Minnesingers in 1404. The earliest mention in English is in 1502, when it is called *clavicymball.*

The oldest harpsichord in the South Kensington Museum, of London, is a Venetian *clavicembalo,* signed and dated Joanes Antonius Baffo, Venetus, 1574. It has a compass of four and a half octaves from C to F. "Raising the top and looking inside, we observe the harp-like disposition of the strings, as in a modern grand piano, which led Galilei,[1] the father of the astronomer, Galileo, to infer the direct derivation of the harpsichord from the harp. In front, immediately over the keys, is the wrestplank, with the tuning-pins inserted, round which are wound the nearer ends of the strings — in this instrument two to each note — the further ends being attached to hitchpins, driven into the soundboard itself, and following the angle of the bent side of the case to the narrow end, where the longest strings are stretched. There is a straight bridge along the edge of the wrestplank and a curved bridge upon the soundboard. The strings pass over these bridges between which they vibrate, and the impulse of their vibrations is communicated by the curved bridge to the soundboard. The plectra, or jacks, with the exception that they carry points of

[1] See page 287.

CONCERT WITH HARPSICHORD

*Eighteenth Century*

leather instead of quills, are the same as in later instruments. This Venetian harpsichord has a separate case from which it could be withdrawn for performance, a contrivance usual in Italy, the outer case being frequently adorned with painting. Lastly, the natural keys are white and the sharps black, the rule in Italian keyed instruments, the German practice having been the reverse." [1]

This was the kind of instrument — the *gravicembalo* — that had a place in the Monteverde's Orchestra (see page 143), and that Domenico Scarlatti is playing in the illustration facing page 182.

Just what the Amati family of Cremona was to the violin, the Ruckers family of Antwerp was to the harpsichord. The Ruckers made the most perfect and the most artistic of harpsichords. Altogether there were about forty Ruckers.

Of this family there were four members living and working between 1591 and 1651, or later, who achieved great reputation. Their instruments are known by their signatures and by the monograms forming the ornamental rosette, or soundhole, in the soundboard — a survival from the psaltery. The great improvement of the harpsichord is attributed to Hans, the eldest, who by adding to the two unison strings of each note a third of shorter length and finer wire, tuned an octave higher, increased the power and brilliancy of the tone. To employ this addition at will alone, or with one or both the unison strings, he contrived, after the example of the organ, a second keyboard, and stops to be moved by the hand, for

[1] A. J. Hipkins.

the control of the registers, or slides, of jacks acting upon the strings. By these expedients all the legitimate variety ever given to the harpsichord was secured. The Ruckers harpsichord given by Messrs. Broadwood to the South Kensington Museum, signed and dated "Andreas Ruckers me fecit Antverpiae 1651," said to have been left by Handel to Christopher Smith, shows these additions to the construction, and was, in the writer's remembrance, before the soundboard gave way, of deliciously soft and delicately reedy *timbre*. The tension being comparatively small, these harpsichords lasted much longer than our modern pianofortes.

"When the Ruckers family passed away we hear no more of Antwerp as the city of harpsichord makers; London and Paris took up the tale." [1]

A Fleming named Tabel established himself in England, and his pupils Tschudi (or Shudi) and Kirchmann (or Kirkman) developed the harpsichord to its utmost and produced what in those days was considered a big tone.

The earliest mention of the pianoforte, or fortepiano rather, occurs in the records of the Este family, in the letters addressed to Alfonso II, Duke of Modena, by an instrument-maker named Paliarino. The invention of the pianoforte is, however, given to Bartolommeo di Francesco Cristofori (1651–1731), a harpsichord maker of Padua, who removed to Florence at the wish of his patron, Prince Ferdinand de' Medici. Cristofori then produced instruments with the hammer mechanism. A stone in Santa Croce, Florence, to

[1] A. J. Hipkins.

Bartolomeo Cristofori records that he was the inventor of the "Clavicembalo col Piano e Forté."

However, the hammer head was small and there was no check to control the hammer in its rebound. At first the pianoforte was not much liked by the musicians. It required a new kind of touch; but as makers added improvements the new instrument gained in popularity and gradually supplanted the harpsichord. Bach did not care for it. His favorite instrument was the clavichord; and he often said "that he found no soul in the clavecin, or spinet, and that the pianoforte was too clumsy and harsh."

But with the piano a new style of playing came into fashion and also a new style of composition. Clementi, Mozart and Beethoven laid the foundations for the modern style of playing. Then followed Hummel and poetic Chopin; and, finally, Liszt, who created modern piano-playing after hearing Paganini's magical violin. In 1839 Liszt gave the *first piano recital* ever heard; and he labored all his life to teach pupils to play the piano correctly and poetically and to put his technical knowledge into permanent form for future generations. And this is how he felt towards the instrument:

"My piano is to me what his boat is to the seaman, what his horse is to the Arab: nay, more, it has been till now my eye, my speech, my life. Its strings have vibrated under my passions, and its yielding keys have obeyed my every caprice. In my opinion the piano takes the first place in the hierarchy of instruments; it is the oftenest used and the widest spread. In its seven octaves it embraces the whole

compass of the orchestra, and a man's ten fingers are enough to render the harmonies which in an orchestra are only brought out by the combinations of many musicians. We can give broken chords like the harp; long sustained notes like the wind; *staccati;* and a thousand passages which before it seemed only possible to produce on this or that instrument."

By the side of this eulogy we may place the following and quite extraordinary description of the piano written by an English musician named William Gardiner, in 1818, just one hundred years ago.

"The pianoforte was scarcely known in the time of Bach; and, from the style of his compositions, it is evident that they were the product of the harpsichord, an instrument of very limited powers, the boldest effects of which were produced by sprinkling the chords in *Arpeggio*, which occasioned a disagreeable jingling. The early sonatas of Haydn, also, bear marks of the influence of this instrument, and possess nothing of the expression of his later works.

"The invention of the pianoforte has formed a new era in the art. It has been the means of developing the sublimest ideas of the composer, and the delicacy of its touch has enabled him to give the lightest shades, as well as the boldest strokes of musical expression. It is the only instrument that will represent the effects of a full orchestra; and, since its mechanism has been improved, Beethoven has displayed its powers in a way not contemplated even by Haydn himself."

Modern composers have experimented with the piano as an orchestral instrument. Saint-Saëns uses it efficiently in his great Symphony in C, dedicated to the memory of Liszt. Perhaps the most successful treatment of it has been made more recently by Stravinsky in his Ballet, *Petrushka.*

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